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APPENDIX TO FIRST REPORT
OF
THE COMMISSIONERS.

MINUTES OF EVIDENCE:

7th November 1913 to 6th April 1914.

Question 1 to Question 12,549.

(First Report of the Commissioners is printed separately in [Cd. 7474].)

Presented to Parliament by Command of His Majesty.



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ROYAL COMMISSION OF VETERINARY SURGEONS

APPENDIX TO FIRST REPORT

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MINUTES OF EVIDENCE

TAKEN BEFORE THE

ROYAL COMMISSION

ON

VENEREAL DISEASES IN THE UNITED KINGDOM.

At 12, Queen Anne's Gate, S.W.

FIRST DAY.

Friday, 7th November 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).

THE RIGHT HON. SIR DAVID BRYNMOR JONES,
K.C., M.P.

SIR KENELM E. DIGBY, G.C.B., K.C.

SIR ALMERIC FITZROY, K.C.B., K.C.V.O.

SIR MALCOLM MORRIS, K.C.V.O., F.R.C.S.

SIR JOHN COLLIE, M.D.

MR. ARTHUR NEWSHOLME, C.B., M.D.

CANON J. W. HORSLEY.

THE REV. J. SCOTT LIDGETT, D.D.

MR. FREDERICK WALKER MOTT, F.R.S., M.D.

MR. JAMES ERNEST LANE, F.R.C.S.

MRS. SCHARLIEB, M.D.

MRS. CREIGHTON.

MRS. BURGWIN.

MR. E. R. FORBER (*Secretary*).

Dr. THOMAS HENRY CRAIG STEVENSON called and examined.

1. (*Chairman*.) You are Superintendent of Statistics of the Registrar-General?—Yes.

2. How long have you held that post?—A little over four years.

3. Part of your duties is to review all the vital statistics every year?—Yes, the vital statistics of the country at large.

4. This Annual Report of the Registrar-General for 1911 that we have deals with England and Wales. Where shall we get the corresponding figures for Scotland and Ireland? Do they come under you?—No, I have nothing to do with the other parts of the United Kingdom. The Registrar-General's office in Somerset House is confined in its scope to England and Wales.

5. Do you know anything of those statistics? Will they be comparable with these? Are they drawn up in the same form as these?—Yes, to a large extent.

6. There is not a common form applicable to the whole of the United Kingdom?—The forms of the tables are not absolutely identical, but for the diseases that you are concerned with especially, I think you might take it that comparability is fairly complete.

7. How is the classification of diseases that you use in your statistics originally arrived at?—We have adopted the international list of causes of death which was drawn up by Dr. Bertillon of Paris, and is founded originally upon the work of Dr. William Farr, the first occupant of the post I hold; so that it really has an English foundation. But the Registrar-General's office took no part in the work of drawing up the list in its present form. We are in no way responsible for its present form. The Registrar-General decided that it would be preferable to subscribe to its use and have a common form with other countries. When there is a question of revision he will naturally be represented on the committee that takes that work in hand.

8. Then you now work on what is really an international basis?—Yes.

9. Have there been any changes made in recent years?—Do you mean in the international form?

10. In the classification?—Yes, a certain number of changes. We are not directly connected with this.

11. Supposing it occurred to the Commission, after their deliberations, to suggest some further alterations in the classification, that could not be until there had been some international agreement on the subject?—The Revision Committee will meet next in 1919, and no doubt any recommendation from this Commission would be considered with respect.

12. Then we should adhere to the practice of following the international arrangements as agreed upon at an international gathering?—I think it is essential to the idea of having an international body of statistics that each nation should adhere, as far as possible, to the scheme laid down for common use. But the scheme is capable of modification in detail, and we have modified it considerably in adopting it in order to meet certain requirements that we conceived existed in our case. It might be that it would be possible for this country to meet any recommendations of the Commission without departing from the general scheme of the international list.

13. Have you made any special study of the effect of venereal statistics upon the vital statistics of England and Wales?—I have given a certain amount of attention to the statistics during the last two or three weeks for the purposes of this Commission. Otherwise I have made no special study. The effect, of course, upon the gross returns is very small. The deaths, after all, are but few that are in any way directly attributable to venereal diseases.

14. (*Canon Horsley*.) Deaths or certificates?—I mean both, certainly—certificates and, in my opinion, also deaths.

15. (*Chairman*.) When the last classification was drawn up, it was not in view at that time to draw up the statistics in such a form as to throw further

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Dr. T. H. C. STEVENSON.

[Continued.]

light on these diseases in their bearing on public health?—I am afraid I do not quite grasp the question.

16. When the last conditions of the statistics were agreed upon, there was no idea at that time of so framing them that the facts bearing upon these diseases and their relation to public health would be brought out?—I really have no knowledge of the ideas that were in the minds of the revisers of the list. As I say, our Office had not adhered to the use of the list, and so it naturally was not represented on the Committee of Revision.

17. Then your figures depend almost entirely upon death certificates?—Yes.

18. Either given by private practitioners or medical officers of the various institutions who return them to you?—Yes; about 7 per cent. founded upon the verdict of coroners' juries, and about $1\frac{1}{2}$ per cent. refer to uncertificated deaths.

19. So that the value of those certificates probably varies considerably in different cases?—Yes. I should say in relation to syphilis the value is very much higher in the case of institutional deaths than in the case of deaths outside institutions.

20. Now, turning to your tables. On page 37, you give under "Deaths from various causes at all ages" returns for syphilis and gonorrhœa. Would you tell us how far you think we are able to rely upon those figures?—When I commenced, as I say, two or three weeks ago, to look into the figures, I was under the impression, that I think is very widely shared, that the national statistics in regard to the diseases under the Commission's review were in a large measure worthless. But the result of my study of the figures has been considerably to modify my opinion, I think there is reason to believe that the figures probably bear some relation to the facts. Of course they do not express the facts, but they bear some relation to the facts.

21. According to these returns, the figures have remained fairly constant throughout a period of years, though the last figure for males is higher than in any of the previous years recorded?—Yes, of the 15 years dealt with.

22. Is there anything in that? Does that mean a small increase, or does the larger figure arise from better returns?—I think it would be very dangerous to form any opinion one way or the other as to that.

23. A very large proportion of those figures are in relation to infants?—Almost two-thirds in the case of syphilis are under one year.

24. Then in the general return of deaths from all causes, those two items of syphilis and gonorrhœa are the only two that bear directly on our inquiry?—We have deaths also from locomotor ataxy, and general paralysis of the insane, and aneurysm, which I think have a very intimate connection.

25. But those include the disease itself as a direct disease?—Yes.

26. And that is all we have?—These are all the deaths that we have certified as due to syphilis and gonorrhœa.

27. Do you think there is any considerable reluctance to certify death—of adults, at all events—as due to one of these diseases?—I am quite satisfied that there is the very greatest reluctance.

28. And might we believe that the certificates which are obtained from institutions are much more likely to be accurate than those which are obtained from general sources?—I think there can be no doubt of that.

29. That consideration would very considerably militate against the validity of these figures?—Yes. As I said, it militates against their expressing the facts; but I think, as I also said, they bear relation to the facts, and a considerable amount of significance must be attached to them as expressing the probable increase or decrease of syphilis, or fatal syphilis of the community during the years under review, or, taking the facts at the present time, its distribution throughout different sections of the community.

30. I understand that for the years from 1897 to 1901, the figures for stricture of the urethra were

included in that of gonorrhœa?—That is so. There was a number of changes made in the classification after 1901.

31. After 1901 there is a different classification?—Yes.

32. And since stricture has been eliminated the figures appear to be smaller?—About one-tenth the size.

33. That has made a marked difference in the figures?—Yes. Of course, substantially from your point of view, I have no doubt that the old arrangement was correct; but there are a certain number of deaths from stricture that would not be connected with venereal disease.

34. As regards these general figures, we must take it they are certainly minimum figures, and the probability is they are largely exceeded?—Yes; I think so, certainly.

35. There can be no doubt on that point?—I have a number of letters from medical men expressing their reluctance to certify.

36. And that is the general feeling in the profession—reluctance?—Yes, undoubtedly.

37. Does that reluctance extend as much to infants as to adults?—I could hardly say definitely as to that; but seeing that the existence of the disease in the infant implies its existence in the parents, I do not see why there should be so much difference.

38. Then on page 39 you deal with two other diseases which are related to venereal disease, first, congenital hydrocephalus. Can those figures be taken as accurate? Would there be any reluctance to certify deaths from that cause?—I should not have supposed that there was.

39. There is not much difficulty in diagnosis in that case, is there?—I presume not.

40. On the same page we come to general paralysis of the insane. May we regard those figures as to be trusted?—Not entirely, but to a large extent, because most general paralytics end their days in the asylums, and they are of course there certified correctly. But the existence of the word "insane" as a portion of the title leads to reluctance to certify in the case of the outside deaths in private practice, which form, I think, 17 per cent. of the whole. I have a number of replies that give evidence of that reluctance.

41. Will you let the secretary have those?—Yes, if they are treated as confidential. They are confidential replies, and of course it would be understood that the names should not be used.

42. Certainly not. Then there must be some cases of general paralysis of the insane which are obviously due to venereal disease which do not get recorded as the cause of death?—I do not think there are many. The usual course taken when a doctor is reluctant to certify general paralysis of the insane is that he certifies general paralysis or general paresis, and in that case I cannot say how long we have done it, but we at present send a letter of inquiry to ask whether the case was one of general paralysis of the insane, so that those cases are roped in.

43. That means that those cases are looked into again?—They are classified under their proper head of general paralysis of the insane. The doctor answers confidentially in a letter which the relatives have no cognisance of, that the disease was general paralysis of the insane.

44. Do you get many of such cases?—Yes, I think a fair number.

45. In any case of doubt of that kind, you would refer?—When we get the certificate with reference to a private patient certifying general paralysis or general paresis we send the inquiry. If a patient died in the asylum, we assume the disease to be general paralysis of the insane. Our experience shows that we can safely do so.

46. On page 40 we come to locomotor ataxy, of which you give the figures, which seem to show a progressive increase. Can we look upon those figures as being accurate, in the sense, that nobody would mind certifying?—So far as I know. I have no knowledge of any prejudice attaching to it.

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Dr. T. H. C. STEVENSON.

[Continued.]

47. And locomotor ataxy would be an obvious disease which could not escape your observation?—I should say it must be pretty obvious from the proportion of deaths that we get returned in rural districts to those in large towns and London. Our experience is that certification is very much better in towns, especially in London, than in the country districts, and from the proportion shown by the deaths returned from locomotor ataxy in the two and from other considerations as well of course, as to which others would be more competent to speak, I presume most of the cases are returned under their proper heading.

48. Then on page 45 we have what you call the "Crude Annual Death Rates from various Causes at all ages to a million living." You classify venereal diseases together, and you arrive at the figures that you give?—That is a summary at the beginning of the table. We have the same summary to the previous table. The two tables are on absolutely similar lines, the one giving the facts, and the other the rates based on the facts.

49. But the summary there contains death due to syphilis and gonorrhœa alone, and not such diseases as general paralysis of the insane?—No; that is so.

50. So that those would have to be added?—Yes.

51. At the top of page 51 you deal with aneurysm as a sub-heading?—Yes.

52. There is no means to discriminate in that case whether the aneurysm might be due to venereal diseases or not?—No. We might possibly get the information that it was in a few cases, but we should not tabulate it. In the great majority of cases we would not get the information, so that tabulation would be useless.

53. And if we get evidence of a large number of cases of aneurysm and a certain proportion was due to venereal disease, would it be right to apply that proportion to your figures here and take that as showing an extension of the disease?—Yes; I think that our figures examined in a certain light show a close correspondence between aneurysm and syphilis.

54. That they move together?—Yes.

55. Then in Table 28 on page 72 you deal with infantile mortality?—Yes.

56. You have them in five age groups up to one year?—Yes.

57. And you classify "All Infants," "Legitimate," and "Illegitimate." That information is only given for one year, is it?—Yes, this refers to the year 1911.

58. Would a comparison of previous years be of any advantage to us?—I am afraid I have not such a comparison. I have here a comparison for five years between legitimate infants in certain counties that are mainly urban in character and illegitimates in those counties, and between the same two classes of infants in counties mainly rural. Of course the information is obtainable for the whole of the country as well.

59. I see the records of the illegitimate infants stand very far above the others?—Yes, very.

60. Have you any information as to that?—I think in part it probably represents the facts, and in part it may be due to the fact that probably more illegitimate infants die in institutions. There are certainly more dying under circumstances that leave the medical attendant a comparatively free hand in regard to certification, I take it.

61. There is less reluctance to certify illegitimate children?—I should think so. For instance, 45 per cent. of all illegitimate infants are the children of domestic servants. I take it the usual story in that case is that the infant is put out to nurse, so that very likely when it dies the doctor does not have to deal with either of the parents at all, and I take it he is likely to feel more free under those circumstances to specify exactly what the child died of than if he were dealing with parents.

62. Of course the majority of deaths, as one sees, are in the first six months?—Yes.

63. On page 89 you deal with the occurrence of legitimate infantile mortality from any cause, and you split that up among the various social classes?—Yes.

64. Those classes are numbered here, and they are really 1, the upper and middle class, 2 intermediate

between middle and working classes, 3 skilled workmen, 4, men partly skilled and partly unskilled, 5, mainly unskilled labour, 6, textile workers, 7, miners, 8, agricultural labourers, and 3 to 8, working class. What does "3 to 8, working, class" mean?—It means the aggregation of all the sub-divisions of the working class. I should perhaps explain what the two intermediate classes mean. They do not represent our choice but our necessity. In a number of cases the occupational classifications of the census are industrial rather than truly occupational, and in those cases it is impossible very often to deduce from the heading under which a man is returned what his exact position is likely to be. We know that he is connected with a certain industry, and that is all. Then he may be a skilled workman in that industry, or he may be an unskilled workman. In that case we have put the occupational heading into Group 4. In other similar cases it has been necessary to put them into Group 2.

65. The unskilled labour seems to come out very very high?—Yes, I think that is what one would expect.

66. On page 93 you deal with infantile mortality connected with the illegitimate children of female domestic servants, and for that you get syphilis a total under one year of 8.5?—Yes.

67. That is very high?—Yes, it is just slightly higher than the average for all illegitimate children.

68. Only slightly higher?—Yes, only slightly higher. The average for all illegitimate children is 8.10 given on Table 28, page 72.

69. That is enormously above the legitimate?—Yes. It is .99 for the legitimate; so that the female domestics' infants are just very slightly higher than the average for illegitimates.

70. On page 198 you deal with general causes of death at the different age periods. There you have the heading "Syphilis" that you have had before, and "Other Venereal Diseases" as a separate heading. That includes these A, B, and C, I suppose?—Yes.

71. That is the first time in your general return these subdivisions come in, is it not?—Yes; it is the first occasion of our using this classification.

72. Has the result of including those extra subdivisions been to increase the figures?—It does not increase the figures in Tables 19 and 20, because those are compiled upon the old classification. We took steps to make our new classification convertible into our old, and of course in a historical table we are bound to adhere to the use of the old classification. We can re-arrange the new work, but we cannot re-arrange the old work. The difference would be with regard to C which we should not formerly have classed to venereal diseases.

73. On page 298 you deal with the places of occurrence of deaths from venereal disease and you do that under four heads, 37, 38A, 38B, and 38C?—Yes, the same heads as in the previous table.

74. According to that, poor law institutions stand far above any other institutions in furnishing deaths from syphilis?—Yes, and they stand above, of course, with regard to all causes, though not to the same extent, I think.

75. For instance, you have 308 males who died in the year in poor law institutions and in lunatic asylums 21 and 109 in hospitals and nursing homes. So that they supply a very large number of your deaths from syphilis?—Yes.

76. May those returns made from the Poor Law institutions be regarded as trustworthy?—I should think so, in the main; but as to that it would be well for you rather to depend upon the views of medical officers connected with the various institutions.

77. Then the returns from elsewhere than institutions depend upon coroners' juries or private practitioners' certificates?—Yes. Of course, in the vast majority of cases private practitioners. The deaths from disease in general in Poor Law institutions outnumber those in hospitals, as shown on page 309 at the end of the table.

78. You also split up locomotor ataxy and G.P.I. on page 300?—Yes.

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Dr. T. H. C. STEVENSON.

[Continued.]

79. There, again, the Poor Law institutions furnish a very large number?—In the case of locomotor ataxy. Of course, in the case of G.P.I. the vast majority of deaths occur in asylums.

80. Yes; the Poor Law institutions have not many. In both those cases of locomotor ataxy and G.P.I., you think the figures may be regarded as likely to be accurate?—I think substantially so. We know that none of our figures are absolutely accurate, but I think those should be substantially so.

81. I have passed over page 97, on which there is an important table. That is the table in which you split up into classes of administrative areas?—Yes.

82. You deal with London as a separate item?—Yes, as representing a degree of urbanisation entirely beyond that of any other town.

83. And the county boroughs represent all other towns in the country, I suppose?—The county boroughs figure is simply the aggregate of all the county boroughs in the country.

84. (*Canon Horsley.*) It will include Liverpool, for instance?—Yes.

85. (*Chairman.*) What is the population of the county boroughs?—It is given in Table 2. It is nearly 11 millions.

86. And "other urban districts"; include all the smaller towns in every county?—Yes, all the towns that form a part of the administrative county.

87. And fall below the borough standard?—Yes, which belong to administrative counties, but not independent.

88. Then rural districts exclude all towns?—All districts which have the status of urban districts in any of their forms.

89. And what does "all urban districts" mean precisely?—It means every area that is not a rural district.

90. (*Sir David Brynmor Jones.*) Excluding boroughs, I take it?—No.

91. Excluding the county boroughs?—No, including all the country except the rural districts.

92. (*Chairman.*) That includes all the county boroughs?—Yes, and London. It is merely added to give the contrast between all the towns and all the country as far as we can give it.

93. According to that, the mortality from syphilis for all infants is higher in the county boroughs?—Yes, very little higher than in London.

94. London being 1·86 and county boroughs 1·90?—Yes. Of course that is a degree of difference that one would attach no significance to.

95. But in your return of county boroughs there are marked differences?—I have not got the figures for syphilis taken out separately for county boroughs. That is being done at the present moment at Dr. Newsholme's request, so that I could give you those figures on another occasion.

96. They would probably be useful to us as showing high prevalence in some county boroughs?—Yes, I presume so. Of course the deaths certified as due to syphilis after all are so few in any one year, that to get reliable data one would have to assemble the results of several years' certification, possibly.

97. Are there any suggestions you would like to make to the Commission as to sources of information supplementing those of your statistics?—I do not know that there are really.

98. Could we make any enquiries which would result in clearing up some of the uncertainties which you say surround your statistics in certain cases?—I do not know of any way of improving the value of these figures in themselves by any inquiries; but, no doubt, means of inquiry outside the official statistics may suggest themselves to the Commission.

99. Have you any suggestions for improving the classification of statistics with a view to giving us greater knowledge, and more certain knowledge, in the future than at our disposal now?—I do not really see that the question of classification comes in very much with such clear-cut diseases as syphilis. For instance, in tracing the history of the disease back, we go many years before any change in classification comes in to upset the comparison. That is the point. In changing

over to the international list no alteration of classification was involved with regard to syphilis or general paralysis of the insane, or locomotor ataxy or aneurysm. So that questions of classification as such I do not think affect these statistics very markedly.

100. But you have told us there are certain cases where, when you are not sure in your own mind, you have sent down and made further inquiry?—Certainly; that is with regard to the quality of the information that we receive. I thought you spoke of classification.

101. I am speaking of classification. To clear up that point, in the first instance it would be rather a matter of classification, would it not? You could so put it that the information would come first-hand?—I was using the word classification in the sense of dealing with the material received.

102. I am referring to nomenclature rather than classification. With little differences in nomenclature, these supplementary inquiries, which you say you sometimes make, would be avoided?—I doubt it. For instance, amongst the letters in my bag here, I have one from a practitioner in which he alludes to a suggestion that the word "specific" might be used as indicating syphilitic. He says in regard to that suggestion, it would not go down in his part of the world. People know the meaning of the term. I should think the same thing would apply after a longer or shorter time to any synonym that might be adopted.

103. (*Sir Malcolm Morris.*) Does that apply equally to mere symbols; that the practitioners of the country might be supplied with symbols which would be absolutely secret so that the individual families would not know?—I should be very sorry to trust the practitioners of the country with the use of a code of symbols.

104. (*Chairman.*) Have you given any thought to the subject of compulsory notification which has been broached in a good many papers of late?—Not very much. In view of what we know of the way in which the compulsory certification works, I should think it would be very largely evaded. There would be a strong temptation to evade it.

105. You think so, even if it were made legally compulsory?—The obligation to certify the cause of death is legally compulsory, but it is very difficult to prove that any practitioner knew any definite fact.

106. You do not think under any form of compulsory notification as regards these diseases, your figures in future years would be very much modified?—I should not like to speculate as to the effect of compulsory notification on our figures; I do not know.

107. (*Sir Malcolm Morris.*) Do you know what the effect has been in New York?—I understand the notification there has been in operation for a very short time. I have the "New York Monthly Bulletin" for June in my pocket, and I rather gathered from it that the effect had been slight so far.

108. So far as the actual causes of death are concerned, you mean?—I just started reading this to-day. I have not gone all the way through it, but my impression is they only regard their work as beginning.

109. They have only been at it a little over one year?—Yes, something like that.

110. (*Chairman.*) Do you follow the statistics in foreign countries?—To a certain extent, yes.

111. Do you know what has been the effect of compulsory notification in Sweden and Denmark?—No, I do not.

112. Do you know how long it has been in operation in those countries?—I see in this report that they were the first to use the new system, but I do not know how long it has been in operation. I gather, not many years.

113. (*Sir David Brynmor Jones.*) I heard you say, I think, that you do not guarantee the absolute accuracy of the figures in this report?—None of the figures; and I would say with regard to the figures relating to syphilis that they must be accepted with a very great deal of reserve.

114. That remark prompts this question: how are these figures obtained? I have a general idea, but I want to analyse the matter a little. Take any page

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you like. By what process are the figures that are on the page arrived at?—With regard to deaths?

115. Take page 37. Syphilis, male, 1,046 in the year 1897?—The figures are arrived at by a different method now from that by which they were arrived at in the year 1897.

116. Then we will take the year 1911 against M.; syphilis, 1,052. I am simply taking that as a test in order that I may see what kind of value really attaches to the figures. Where do you get the 1,052 from?—The value is entirely dependent upon the degree of accuracy of certification. That number, 1,052, represents accurately the number of deaths that were registered as due to syphilis. That is all we can say; the number of deaths that are registered as due to a cause. We are in the same position as you or anybody else when it comes to speculating as to what the number of deaths really due to a cause may be.

117. Then if the Registrar-General adopting the certificate sees "syphilis," he puts it under the heading of syphilis?—Yes, certainly. The tabulation at present is carried out by a card system. The code number of syphilis which, as you have seen, in some of the tables is 37, is stamped upon a card. The card is perforated in one place at figure 3 and in another at figure 7, and by mechanical means all those cards are assembled together, and then in a further operation they are counted, and it was found there were 1,052 in the year 1911.

118. Then apart from the figures founded upon the verdicts of coroners' inquests, the validity or accuracy of the figures depends upon the good faith and skill of the medical practitioner?—Yes, entirely.

119. I think you referred to correspondence. How does this correspondence begin if you rely upon the certificates only?—Of course, certificates as written obviously differ in value. They differ, for instance, in definiteness. There is a very large number of certificates which assign indefinite causes of death. In certain of those cases it has been the practice in the Registrar-General's office for many years to send letters of inquiry asking for further and more definite information, and it was to the replies received to those inquiries that I referred.

120. I do not quite understand the term "indefinite cause." Does that mean that some disease unknown to the Registrar-General is specified?—No; it may mean, for instance, that a symptom is specified instead of a disease.

121. Do you mean by that that the certificate bears marks of doubt in the mind of the doctor who attended the deceased?—Take, for instance, the term "brain disease." If we got a certificate specifying brain disease, as we get a few, we should write to know what the disease actually was; and in some cases where we get them specifying merely symptoms such as "heart failure" or "coma" or something of that sort, we send inquiries. We cannot do it in all cases, because we have not the staff to cope with it.

122. Is it the custom of medical men to return only the proximate cause of death as the cause of death for the purpose of satisfying the department or the general law?—There are all classes of certificates received from various medical men, good, bad, and indifferent. The quality of certification in general is constantly improving. It is very much better now than it was even 15 or 20 years ago, but there is a great deal of room for improvement still.

123. (*Sir Kenelm E. Digby*.) As I understand, you have made further inquiries when the description is of a very general character?—In certain cases. Our system is one for sending out inquiries with regard to certain forms of certificates. I thought I had a copy here of the Registrar-General's manual of causes of death. That contains an alphabetical index of all the forms of certificates that we, as a rule, receive, and against certain of those forms a star is printed indicating that a letter of inquiry is sent when that form of certificate is received.

124. But that would not be the case, as I understand, in syphilis?—No, certainly not.

125. You used the expression that that was a clear-cut disease?—Yes, certainly. No further information could very well be asked for.

126. (*Sir Almeric FitzRoy*.) We know, of course, that there is a statutory obligation to certify deaths; but certification is by no means a universal practice, is it?—98½ per cent. of the deaths in this country are certified.

127. You mean that no appreciable number of deaths escapes the meshes of the Registrar-General's net?—That is a question of registration, not of certification. We have no knowledge of the deaths that are not registered. We believe them to be very few.

128. You believe them to be very few, but you do not know?—Naturally, if we knew of them we should see they were registered.

129. Yes; but you do not think a great number escape?—No, we think very few escape.

130. It is admitted that your statistics are very incomplete for the causes you have given. Would you be prepared to add conjecturally any approximate percentage to the figures given in the table, so as to bring them to some higher degree of accuracy?—I did work out rather a fanciful conjecture based upon the proportion of deaths returned as occurring in institutions from syphilis, and that, on the assumptions made—which I do not mean to say are necessarily true—would increase the number of deaths from syphilis by some 400 or 500.

131. How do you reach that?—The idea was to assure, for the purpose of estimating, that all the deaths occurring in institutions due to syphilis, or that were recognised as due to syphilis, were returned as such, and then to assume further that the proportion of cases of fatal syphilis that found their way to institutions is equal in the proportion of cases of death from all causes. If those two assumptions could be held as approximately true, then the shortage of deaths outside institutions would be about 400 to 500.

132. In all?—Yes, in all in a year.

133. (*Canon Horsley*.) Per 10,000, or the whole of the population?—The absolute total in a year is 1,790, or something like that. Referring to my notes to refresh myself on that, if we assume the true proportion of institution deaths to be equal to the average for all causes, 23 per cent., then the real total of syphilis male deaths is 1,466, or 409 in excess of the recorded total of 1,057. I see that estimate refers only to male deaths.

134. (*Sir Almeric FitzRoy*.) An addition then of nearly 50 per cent.?—Yes. Of course if the deaths of females on that basis were added in, you would get a considerably larger number than the number I speak of.

135. Is not syphilis a very constant cause of still-births?—Yes, no doubt.

136. Is there any statistical information obtainable on that point?—We can give the number of premature births, of course.

137. That is not still-births?—Still-births can be got under the Notification of Births Act, and under the Midwives Act.

138. Yes; but is the registration of them under those Acts in any way complete?—I think Dr. News-holme could tell you more as to the completeness of the Notification of Births and the operation of that Act than I can. I believe it is between 80 and 90 per cent. of registered births that are notified.

139. Still-births?—No, registered live births. Of course one could only deduce some idea as to the completeness of the notification of still-births from the completeness of the notification of live births.

140. Do you not think there ought to be registration of still-births?—Certainly.

141. Why has it never been done; have you any idea?—There are a great many things we should like to be done.

142. Yes. But it has been recommended by two or three committees. You are aware of that?—Yes; and so have other changes in regard to the work of our department.

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143. You attach great value to it?—I should attach very considerable value to it. There are other changes to which I should attach greater value still.

144. (*Sir Malcolm Morris.*) Was there any differentiation in the certificates as regards the deaths from syphilis, as to the particular mode of death from it?—I have no doubt in some of the cases there would be.

145. I mean, do they simply record the word "syphilis," without any details as to what particular organ is affected, and the actual cause of the death?—I am afraid I cannot answer that question very definitely. I think probably in a great many cases only the word syphilis is used. In other cases no doubt we should get further details.

146. That syphilis would be put down as a primary cause, and then something else as a secondary cause?—Yes. As a matter of fact we never have tabulated, until this report appeared, the secondary causes of deaths. We have now started a system of doing so. Going over the list in portions, the first portion is included in this report. The second portion is now being worked over, and syphilis coming early, No. 37, it will very soon be dealt with. When that has been done I shall be in a position to answer your question fully; but until it is done I can give you very little information.

147. Would you think, for example, aneurysm and other causes of death were not included in this particular return?—If we got aneurysm due to syphilis, we should put the death down to aneurysm.

148. And not under syphilis?—Not under syphilis, because there we should infer that the syphilis might have ceased to be present at the time of death, and then the death was due to a condition dependent upon a past history of syphilis.

149. Yes, only the remote effect?—Yes, the same thing would apply to locomotor ataxy, or to general paralysis of the insane.

150. Were any of these recorded as early deaths from syphilis; that is to say, really deaths from the actual disease itself?—I believe most of our deaths in adult life occur during the tertiary stage, so I understand. But again I may say that until this secondary tabulation has been carried out for syphilis we are rather at sea.

151. So that these returns do not really convey very much as to the actual amount of death from syphilis, so far as the country is concerned?—They do convey the practitioner's opinion that the death was dependent upon syphilis, whether directly or indirectly.

152. As regards the next column, the question of gonorrhœa, have you formed any idea what death from gonorrhœa really means, of course leaving out the question of stricture and its collateral causes? The earlier figures show that the majority of them were obviously due to stricture?—90 per cent. were due to stricture.

153. What does it mean by deaths from gonorrhœa in all the others?—I really do not know. The number is so inconsiderable that one has not paid any attention to the matter.

154. These other figures concerning females do not include remote effects of gonorrhœa?—Pelvic conditions?

155. Yes?—No. For instance, pyo-salpinx, and things of that sort are put under the affections of the female genital organs.

156. (*Mr. J. E. Lane.*) Is there any explanation for the omission of phagedæna? There are no deaths reported from phagedæna in 1913, whereas in 1897 there were 53?—I think that is an obsolescent term as far as our experience goes.

157. Phagedæna is a term in constant use now, is it not?—I think it is in much less common use than it was, probably; at least on death certificates. I should qualify what I say in that way.

158. And many of these cases of peritonitis here would be caused by gonorrhœa?—Yes. Of course we only class a death to peritonitis if we have no further information. If we have no information as to the cause of peritonitis so that it may be due to gonorrhœa or any other source, we have no alternative.

159. So that we could have no idea of the indirect fatality on the female sex?—No; I am afraid that is absolutely hopeless from our returns.

160. Then there is the heading of "Caries, Necrosis," &c., on page 43?—That heading furnishes an instance of the improvement in definiteness of certification, and of the great drop that has occurred during the last two or three years. Caries of the spine was formerly listed to this head. Now an inquiry is sent which enables practically all caries to be put to tubercle of the spine. In fact I am not sure that we did not find that was so universally the case that we ceased to send the inquiry, and we assume now that caries of the spine means tubercle.

161. Then under the heading of death from arthritis, periostitis, there is no differentiation between the varieties of periostitis?—No.

162. So that many of those might be syphilitic?—Yes. Of course that is one of the ways in which a practitioner who wishes to avoid the use of the term can do so without falsifying his certificate; he suppresses the truth.

163. And the same with other diseases of the locomotor system?—Yes.

(*Mrs. Creighton.*) I have no questions.

164. (*Mrs. Scharlieb.*) You do not enter the abortions from the point of view of the embryo. You only enter them from the point of view of the mother. We do not get the number of children lost?—No; we have not a registration of still-births.

165. Do you not think a great number of cases of abortion are really due to venereal diseases?—I have no doubt your opinion on that point would be of much more value than mine.

166. But you have nothing to do with it?—No; they do not come before us at all.

167. (*Dr. F. W. Mott.*) You have a number of deaths down to symptoms; take paraplegia, for example?—Yes.

168. There are 2,000 odd die of paraplegia?—Yes.

169. A very considerable number of those would be due to syphilis, would they not?—It is hard to say what the proportion is, of course.

170. Then you have a very large number down to convulsions of infants, and it is my experience to find that after still-births children die quite early of convulsions, if there is any history of that kind?—I do not think it would be at all safe to assume that any large proportion of convulsions were due to syphilis—for this reason, that convulsions have come down enormously during the last 25 years, say, and syphilis has not gone up.

171. Still, there are a considerable number?—There are, no doubt, some. But I should be very sorry to attempt to estimate the amount of syphilis mortality from the amount that one might suppose to be hidden away under paraplegia or convulsions.

172. Then angina pectoris. Do you not think syphilis has a causal relation to arterial disease?—Yes, undoubtedly.

173. It is the indirect cause. Syphilis, *per se*, does not kill people; but it is the remote effects on the tissues of the body, especially on the blood vessels and the brain?—That is a matter on which I cannot speak.

174. No; but we only want to get the relation of syphilis to disease, and unless we take this into consideration we do not get the relation of syphilis to disease?—Quite so. But it is quite hopeless for us to give information there. In the present state of certification we cannot expect to get the cause of arterial degeneration in any large proportion of cases.

175. But you would admit, would you not, that syphilis is one of the most important causes of arterial degeneration? It produces aneurysm?—Yes. I think there is some evidence from our figures to show that there is a very close connection with aneurysm; that the proportion of deaths from aneurysm dependent upon syphilis must be very large.

176. If it produced sclerosis of the arteries, it would be accountable for a great many cases of

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dilation of the heart?—Yes. Of course that is one of the forms of indefinite certificates.

177. I admit that—and fatty degeneration of the heart, and syncope of the heart. There are an extraordinary number of deaths due to dilatation of the heart and syncope?—Yes. Of course the possibility of syphilis deaths in our returns, I admit, is enormous.

178. That is what I want to get at. Then a considerable number of people die of softening of the brain. That does not come under the head of syphilis at all. But in countries where they have notification of syphilis, they estimate that, as many people die of syphilis of the nervous system as die of general paralysis and locomotor ataxy; so that a great many of these cases of softening of the brain—over 2,000—would undoubtedly be due to brain syphilis?—That may be so; but when I have been speaking of the amount of syphilis, I have had in view not the amount of mortality dependent directly or indirectly, no matter how remotely, on syphilis, but the amount of mortality known to the practitioner in attendance to be due to syphilis. I think the two points of view are different, are they not?

179. Quite, I admit the difficulty; but what we want to do is to convey to the practitioner the fact that, unless syphilis is properly treated, it is not got rid of during the whole of a man's lifetime, but it is producing disease of his tissues?—Quite so. All I want to establish is, that when I spoke of that provisional estimate it referred to something entirely different from the figures that you are referring to now. It referred to the mortality probably known to the practitioner as due to syphilis. But I take it the mortality in your mind is, in many cases, not known to the practitioner.

180. No, I think very often the practitioner knows the cause, but he does not put it on the certificate because the friends see it?—Yes; but I presume in many other cases there would be no opportunity, for him to know the cause.

181. How long have you recognised that general paralysis is syphilis?—I do not know. I think it was a matter generally taught when I was a medical student. I do not know really how long the Office has recognised it. Of course, it does not recognise it in the way of classing it under that head.

182. No, it does not. In meningitis a great many of those cases are syphilitic, but the practitioner would not put it down as syphilis. He would be quite within his rights to certify it was meningitis?—Of course in all those cases, if he wants to avoid the use of the term "syphilis," he certifies the manifestation of it, not the cause.

183. (*Canon Horsley.*) A plain way of stating everything is, that in two categories these figures must be useless to the general public; the two categories being venereal disease and alcoholism?—I disagree with that view entirely.

184. But you have already said these represent the minimum figures?—Yes.

185. That is to say, in numerous other cases if the doctors did not spare the feelings of relatives, they would put down syphilis and alcoholism; whereas, at present they do not?—No.

186. It is a matter of common notoriety. All my doctor friends tell me so. You have down here, atrophy, debility, and marasmus accounting for 41 per cent. of everything. At the first blush marasmus has nothing to do with syphilis. It does not convey the idea?—Not to the public.

187. My own doctor wrote to me a few days ago saying that when there was a case of death in children from syphilis, marasmus was the term usually employed to cover syphilis. He is a leading doctor in London; but he generally puts down marasmus when he means syphilis?—Marasmus is a term in very much less common use than it was formerly.

188. It is 41 per cent.?—What table is that?

(*Canon Horsley.*) It is on page 93. It accounts for 41 per cent. of the illegitimate deaths.

189. (*Dr. Newsholme.*) It is not 41 per cent. of the total. It is 41 per thousand?—44 per thousand deaths

are due to atrophy out of a total of 245 per thousand. (Table 28.)

190. (*Canon Horsley.*) Marasmus as a heading in most cases might be syphilis?—Quite.

191. It is generally used?—Almost anything I take it, or a great many indeed of the headings, might be syphilis.

192. And both the defects in the matter of marasmus and venereal disease are due to that laudable desire, perhaps, of sparing the relatives' feelings?—Yes. In the case of syphilis the concealment is probably in most cases due to that, but the question of insurance also enters into it.

193. And also with regard to alcoholism?—Yes.

194. A great many other diseases are due to venereal diseases, or occur only in people who have had syphilis; but if that is not the immediate cause it is not put down?—Quite so.

195. That covers a great many, I suppose? Will you ever get any remedy until you get certificates made official documents that are not communicated to friends?—I think that is the only means by which we can get it.

196. Make every certificate an honest one, leaving the doctor to say what he pleases or thinks he is justified in saying to the friends?—Yes; and I may say that I join with the Registrar-General in advocating that course very strongly.

197. I was talking to a doctor the other day, and I said, "How can you say that it is not humbug?" He said, "Medically we call it tact." But the public want to know the facts and not to have friends' feelings saved?—I think it is placing the doctor in an entirely false position, and I cannot see why, although as long as a person is alive, it would be the gravest professional misconduct on the part of the doctor to reveal the nature of his illness he should be asked to communicate the information to all and sundry as soon as the poor man is dead.

198. Is not that also a very strong argument against any compulsory notification?—Yes, I should think so.

199. You can contract these diseases in a perfectly innocent way by contact in a railway carriage or anything like that?—Yes.

200. Supposing, for example, it has to be compulsorily notified that I, living in a certain parish, have a certain disease, and that leaks out somehow. While there is the possibility of its leaking out, it is not likely they will notify, is it?—No; and even if there were no possibility of its leaking out, it is difficult to convince all concerned that there is no possibility.

201. I cannot contract alcoholism innocently, but I can contract the other diseases innocently?—Yes.

202. One thing puzzles me, but probably it is only my ignorance. Why is it that so many more boy babies die from syphilis in the first month than girls? There are 195 boys and only 148 girls?—I think you will find many more boy babies die from all causes in the first month than girls.

203. I know; but to such a large extent as that?—I could not say without consulting the figures.

204. (*Rev. J. Scott Lidgett.*) We are to understand that there are a great many more deaths take place from venereal diseases than these statistics show?—Undoubtedly.

205. But I take it you do not intend to suggest that many certificates are absolutely faked as to the cause of death when syphilis is not recorded?—I think the usual course is to record some of the manifestations of syphilis from which the existence of syphilis cannot be deduced.

206. For a non-medical member, could you give us anything like a list of the diseases under which one might suspect that syphilis lay buried in these returns?—I am afraid I am not specially qualified to draw out such a list.

207. It would be rather important for us to get it, would it not?—Yes, certainly. No doubt you will in a position to get it.

(*Chairman.*) We shall have all that information later on.

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208. (*Sir John Collie.*) Would I be right in saying there is a very large number of cases of indirect deaths from syphilis which these tables do not demonstrate?—No doubt.

(*Mrs. Burgwin.*) I have no questions.

209. (*Dr. Newsholme.*) You gave the number of deaths due to venereal diseases in the year 1911. I think the total number from syphilis was 1,856?—Yes.

210. And from other venereal diseases, 66; from general paralysis of the insane, 2,201; locomotor ataxy, 635; making a total of 4,758 in that year?—Yes.

211. You have already told us that in your opinion that very greatly understates the facts?—Yes.

212. Do you remember the figure for tuberculosis for the whole year?—I think it is somewhere about 50,000.

213. 53,000?—One takes it as 10 per cent.

214. So that apparently tuberculosis causes about 9 or 10 times as many deaths as syphilis?—On the figures, taking them on their face value.

215. But the real proportion in your opinion would be very much modified if the whole of the facts were revealed?—No doubt.

216. Then as indications of the revelations that might come, you would look to deaths ascribed to premature birth as enabling a large transfer to syphilis to be made. The total number of deaths from premature birth was 17,700 in 1911. Could you give any idea as to the proportion of those which might be due to syphilis?—No, I am afraid not. I have not been able to see any means of estimating the probably syphilitic contents of these indefinite headings. In the case of premature birth the mortality rose from the year of our first record, 1857, until quite a few years ago, about 10 or 12 years ago, and since then it has been falling. That course is not at all parallel to the course taken by the mortality from syphilis.

217. You know the proportion of deaths ascribed to this cause varies enormously in different parts of the country?—I presume so.

218. In a recent report issued by the Local Government Board giving the average figures for four years, extremes were mentioned?—Is this premature birth?

219. Premature birth and congenital defects?—Yes, I have figures of that myself.

220. Could you give those? There are such extreme variations in different parts of the country?—I have the mortality from premature births taken out.

221. We will take those alone if you have them separately?—That is only the last few years. That is by legitimacy and the distinction between urban and rural. I have here the mortality from congenital debility and malformation including premature births for London, the county boroughs, and for urban and rural districts, and in each case for the north of England, the Midlands, the south of England, Wales and Monmouth.

222. Suppose we compare the north of England and the south of England, what is the difference?—For all areas in the north of England the figure is 1.09 and in the south .80.

223. A very striking difference?—I do not think it is more than the difference between the mortality in general in the north of England and in the south, speaking from memory.

224. Then you know the figures from atrophy, debility and marasmus, which are grouped together by you bulk very largely in the returns. There are nearly 13,000 deaths put under those headings?—Yes, of course, that figure is on the down grade considerably.

225. There again you are not able to state what amount of syphilis is contained in these indefinite headings?—No, we have reason to believe they vary so much and are changing so much, that I think no conclusion as to the increase or decrease of syphilis in the community could be gathered from its history. The figures used to be enormous. I have some here. The mortality from atrophy and debility in the sixties was about 1,500 to 1,600 per million living, and it has sunk to between 300 and 400.

226. Have you formed any estimate of the probable number of cases of syphilis in the country as judged by the death returns or judged by any other method?—

No, I have formed no estimate as to the number of cases. I did indulge in speculation—I would not like to call it anything more—as to the number of deaths occurring and known to their medical attendants to be due to syphilis in the way I have described already.

227. And that showed that of all deaths occurring in institutions, the percentage ascribed to syphilis would have increased about how much? Did you deduce the percentage?—I think about 800 or 900 total deaths.

228. Additional deaths?—Yes.

229. That does not seem to point to any very great deficiency in the death returns?—That, of course, only applied to cases known to their medical attendants to be dependent on syphilis. It only applied, in other words, to the purposeful concealment of the fact when it naturally would be notified if there were no motives for concealment.

230. I gather you are strongly of opinion that death certificates should not be handed over to the surviving relatives?—Certainly.

231. What would you propose instead?—I would propose some modification of the system so far as I know in universal use on the continent of Europe by which the certificate of the cause of death is treated as a confidential document, and is kept entirely distinct from the certificate of the fact of death.

232. To go only to the registrar, I suppose; or would you have it sent direct to Somerset House?—I think it would be advantageous that it should pass through the hands of the registrar, and that the local Sanitary Authority should have the advantage of the information contained in it, for sanitary purposes.

233. Would you allow access to the information to the registrar and the medical officer of health in comparing the statistics?—Yes, I think one might go so far as that.

234. Do you think that that reform, when it became enforced, would cause any inconvenience to insurance societies, for instance?—I think it might oblige insurance societies to modify their present methods of conducting their business to a certain extent.

235. Their business is based generally on experience, and the causes of disease are a very important part of their experience. If you do not allow them access to information as to the causes of disease, how could they guide themselves as to the future?—You mean, of their insured persons?

236. If they are not insured persons. For instance, they may at present have a rule that if a man has had syphilis, they add 5 or 10 years to his life. That would be based on past experience; but if you take away the certificate you take away the information on which to act in the future?—I take it the difficulty has had to be met in other countries where the system is in use.

237. Let me ask you some points on which there happens to be some difficulty. There is a large number of industrial societies which insure working men for small sums, 10*l.*, 15*l.*, or 20*l.*, and do it without any medical examination. In these societies they make the insured person sign a statement that he is not suffering from any known disease at the time. Then subsequently a certificate as to the cause of death is given, which shows he must have been ill at the time he was insured. Would you embarrass this business?—I think that is a vicious way of doing business.

238. You think it would be an excellent thing to embarrass such a business as that?—Yes, I expect it certainly leads to attempts on the part of the public to defraud the insurance companies, and I am afraid in some cases to what practically amounts to an attempt on the part of some of the agents of the insurance companies to defraud the public, when they rely on the ignorance and carelessness of insured persons not to read the conditions carefully.

239. As regards the cost, at present the State has imposed a duty without payment of certifying the cause of death on every practitioner attending a patient. Would you propose that these confidential certificates should be sent to the registrar without payment?—I am having inquiries made at the present moment as to what is the practice in regard to that matter in France, Germany, and other countries where the confidential certificate system is in use. But I may say

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in regard to it, that we receive a certain number of letters from practitioners asking us why we do not take steps to get such a system introduced. They are evidently written by men who would welcome such a system, as relieving them from an embarrassing situation.

240. Then you suggest that many of the doctors in this country would be willing to perform this duty gratuitously in order to relieve them from their present obnoxious position of having to put "marasmus" say, instead of syphilis?—I believe some of them would. I have no means of estimating the probable number of these.

241. But are you of opinion that a much larger number would not resent very strongly having to give a confidential certificate to the State without any payment whatever for it?—I think that the profession would probably welcome the opportunity of trying to get payment for a service which it has hitherto had to render without payment.

242. Supposing 2s. 6d. were charged for each death certificate, that, I believe, would amount to something like 52,000l. per annum for England and Wales?—I thought it was a trifle more.

243. I am not sure, but it is somewhere thereabouts. That is not, to your mind, a prohibitive sum?—I have generally heard the sum of 2s. 6d. suggested in connection with the proposed duty of the practitioner to view a body and certify to the fact of death. I do not think it would be at all too large a fee if that duty were imposed upon him.

(Dr. Newsholme.) I am not suggesting it is too large a fee.

244. (Sir Malcolm Morris.) That is a very important point of inspecting the body. A certificate is given to the person who applies, in the ordinary way, for 2s. 6d.? I think for the mere putting in the post of a certificate, which at the present time a practitioner has to write out in any case, 2s. 6d. would be rather large. I should have thought a smaller sum would have sufficed.

245. (Dr. Newsholme.) You have expressed the opinion that although the official figures as to syphilis do not represent the whole truth, they are not destitute of value and they can be used to some extent?—I think they have a comparative value. I have been rather impressed with that fact by my study of them. I started with as great a prejudice against their value probably as anyone else could have, but I have modified my opinion.

246. I may say I share that opinion, and I should like for a minute or two to take you over the comparison between the past and the present time. If you look at the general curve of syphilis per thousand of the population for the whole of the population, it shows a very marked decline?—Of late years. There was a period, of course, when it showed a very high rise I have the chart here.

247. I have a chart here also, but perhaps you would hand yours afterwards to the Chairman?—Yes.

248. Take from 1891 onwards. I think there has been a reduction of 25 per cent. in the death-rate from syphilis at all ages?—Yes, I think so.

249. You may take that from me?—Yes.

250. Then take the death-rate from infantile syphilis between 1891 and 1911. There has been a decline of about 13 or 14 per cent.?—I have not that figure.

251. If you look at the two curves, although they do not show the same amount of decline, they both point definitely in the same direction?—Yes.

252. If I turn away from your figures for the moment and compare those with the army statistics, either taking recruits or taking the whole army, you will find there a somewhat similar but greater decrease?—Yes, so I understand.

253. Do you attach any importance to the fact that in the army there is a decline, and in your statistics there is a decline, both sets of curves pointing in the same direction?—Of course, I am not in a position to form any estimate of the degree to which the decline in the army figures may be attributable to improved treatment.

254. There is one other point as bearing on the decline. I suppose you would agree that the fact that the proportion of deaths occurring in institutions has enormously increased would tend, other things being equal, to increase the registering of deaths from syphilis?—Yes, certainly. I think if there had been no other change but that, the mortality from syphilis, as returned, would have increased.

255. And the fact that the percentage of deaths in institutions has greatly increased and the registered death-rate of syphilis has gone down, would militate strongly against any notion that syphilis has increased in this country?—I do not know that I should think it absolutely inconsistent if there were evidence strongly in the other direction; but to my mind it certainly points in the direction of decrease.

256. There is *prima facie* evidence in that direction?—Yes; and there is a further point parallel with the increase in institutional deaths, that is, the increase in the urbanisation of the population; because we have abundant evidence that syphilis is a disease of large towns.

257. I would like to take that point next. A few days ago you handed to me a very valuable table dealing with the mortality from general paralysis and locomotor ataxy in England and Wales as a whole, in London, the aggregate of the county boroughs, the aggregate of urban districts and the rural districts?—Yes.

258. Could you conveniently hand that in to the Commission now?—I have a condensed form of that table which embodies all the information that I should care to supply at the present time. I may say with regard to that table, which differentiated social classes, it is only possible at the moment to supply it in the form of mortality at all ages, and in a comparison of mortality between different classes of the community whose age distribution obviously is liable to variation such a comparison is unsafe; and therefore I should like the opportunity of supplementing this table at a later date.

259. But subject to these very important corrections which you have named and which you will supply later, the crude figures of death-rates per million living, I think I am right in saying, show a larger death-rate from both these diseases of locomotor ataxy and general paralysis of the insane in London than county boroughs, in county boroughs than in other urban districts, and in urban districts than in rural districts?—Yes. The death-rate from syphilis in London is over four times as high as in the rural districts, and the decline from the London to the rural districts is progressing as you go down the scale.

260. You attach importance to those figures as dealing with the present day?—Yes.

261. And showing the real state of the facts?—Yes; I think they must. I think the returns with regard to syphilis have a very definite comparative value.

262. (Sir Malcolm Morris.) Is there not a possibility that rural people come to London for treatment and then die?—Very few syphilis deaths in the rural areas occur in institutions.

263. (Dr. Newsholme.) I was coming to that point; we will expand it at once. The Registrar-General in this report for 1911-12 has adopted a system of distributing all institutional deaths of people who reside in other districts than the towns?—Yes; that is carried out so far as practicable. It is carried out in the vast majority of cases. The death is referred to the area of residence.

264. Your general conclusion from these figures which you have would be, that venereal diseases are more fatal, and probably also more prevalent, in London and the largest towns than in rural districts?—I can conceive of no circumstances which would make it so much more the practice for the doctors in rural districts to conceal the fact than in the large towns.

265. You have indicated certain additional information that you might supply from your department. Can you tell us how soon the Commission might have your information as to the deaths in which syphilis is returned as a secondary cause of death. I think you said you were beginning a classification of the secondary

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[Continued.]

cause of death?—We should have practically no cases in which syphilis was returned as the secondary cause of death. What I was referring to was the conditions mentioned along with syphilis on certificates mentioning syphilis, and therefore listed under that head in our returns.

266. The Commission will be able to have that after a while?—Yes, we can supply that in a short time.

267. Then you mentioned also the local distribution of deaths from venereal diseases. That also you will be able to supply so far as the figures are available, at a later date?—Yes. The figures are at the present moment tabulated for London and the county boroughs, for instance. To-morrow I suppose they will be available for the whole of the country for syphilis.

268. You were asked earlier as to the possibility of improving the certification of deaths due to syphilis, and the influence of notification of the disease upon such certification. I take it the most important means of getting improved certification of deaths from syphilis in order to get a greater knowledge of the disease, would be to have more complete diagnosis, and more available treatment. If, for instance, every practitioner in the country had available for his use a free Wassermann test, would that, in your view, be likely to increase the accuracy of the statement as to the cause of death?—I have no doubt it would, but that raises important considerations as to classification of causes of death. How far we could refer deaths from remote consequences of syphilis to syphilis is very doubtful indeed. It is not the practice of the international classification to assign a death to any cause which was not present at the time of death.

269. That is one of the most difficult points in the classification of disease?—Yes.

270. Take for instance the illustration given by Dr. Mott of angina pectoris. The original disease may have been caused by syphilis?—Yes.

271. If that syphilis was 30 years ago, and there was no present evidence of syphilis —?—If we have no information as to active syphilis under the rules accepted as regards the classification of causes of death, we could not put the death down to syphilis.

272. In fact the information to be obtained from the pathologist differs very materially from the information which can ever be expected to be obtained on a national system of statistics?—Certainly. I tried to make that clear; we had two different points of view.

273. (Chairman.) I notice in your returns that childbirth does not appear as a cause of death; but you assign various causes to childbirth. That is so, is it not? It does not appear as a sufficient cause?—We have a number of deaths for which no other cause was assigned, and other accidents of childbirth, heading No. 136. A death returned as merely due to childbirth would go there. We have a special table relating to childbirth which will show the number of those deaths, and the number also in which childbirth is mentioned as the complication of a death from any disease or condition.

274. My point is that you do give causes in many of the cases, and you are not satisfied that childbirth is a simple declaration of death. Is that so? On page xci there is a table showing the details with regard to deaths of women, classed to pregnancy and child-bearing.

275. (Canon Horsley.) There is an important one on page xevi. There is a case here where you have 163 cases of pemphigus, and not a single case due to syphilis. But when you make inquiries you find that 91 of the cases are due to syphilis?—Quite so.

276. That is very striking. There are more than half due to syphilis. That is what I mean about the misleading character of this. If it went on like that, it would double the number of cases?—I am afraid we could find few such fertile fields of inquiry.

277. (Chairman.) To finish the point I am on, you have a number of causes to which deaths from childbirth can be assigned?—Yes.

278. That means that in most cases when looked into, if the cause can be assigned, it is assigned. Then to come to premature birth, you take premature birth as a full and sufficient cause without assigning a real cause?—I cannot say for certain; but I expect that in the majority of cases it is the only cause returned on the certificate.

279. That is what I mean. When a premature birth is recorded, should not a cause to which it can be assigned be stated on the certificate?—I presume if the practitioner considered there was a disease present which had caused the death, he would return it under the head of this disease, in spite of the fact that the birth was premature. I have no reason to suppose that our deaths assigned to premature birth include the whole of the deaths of infants prematurely born.

280. The certificate of premature birth suffices, subject to certain cases?—I should have to look into that matter, and it would take a considerable time to do so. It would want some organisation to get the material together. But my impression, merely as an impression, is that most of the deaths returned to premature birth are probably certified merely as premature birth.

281. Might it not be an obligation to state the cause of premature birth, if that cause was obviously ascertainable?—The Registrar-General has no power, of course, to do anything more than to make requests, and he does make requests for as great precision as possible. He has made a very elaborate one within the last two or three years, in the form of a memorandum bound up with every book of certificates of causes of death showing the more important indefinite forms of certificate received, and the manner in which he would like to have it amended. It would be possible to put in a new edition of that a request with regard to premature birth.

282. My point is this. We get 17,709 deaths recorded from premature birth. It is probable that a considerable number of those premature births and consequent deaths are caused by venereal disease in some form or another. If in any possible way by the returns it would be possible to analyse those figures, it would be an advantage?—Certainly.

283. May I take it your general view is, that some form of compulsory confidential notification is practicable?—I have really formed no definite opinion upon that subject at all; but judging from our experience with regard to the certification of causes of death, which is compulsory, I should doubt very much the degree of completeness likely to be arrived at.

284. But the enforcement of the compulsory notification must have helped you in the case of other diseases?—I do not know that the case of other diseases is parallel.

285. No, it is not; but it has helped you in the case of other diseases?—I really have no information as to that.

286. (Sir Malcolm Morris.) Tubercle?—I do not know whether it has helped us or not. The numbers have not been much affected.

(Chairman.) We are very much obliged to you.

(The witness withdrew.)

SECOND DAY.

Monday, 10th November 1913.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. CREIGHTON.
Mrs. BURGWIN.Mr. E. R. FORBER (*Secretary*).

Surgeon-General ARTHUR W. MAY, C.B., R.N., called and examined.

287. (*Chairman*.) Will you state what is the full title of your office?—I am the Medical Director-General of the Navy.

288. How long have you held that office?—Six months.

289. And previous to that what office did you hold?—I was Deputy Director-General for four years.

290. At the Admiralty?—At the Admiralty.

291. Have you given any special and particular attention to the subject of the diseases in which we are interested?—Yes; I have been in charge of the Chatham Hospital and second in command of the Plymouth Hospital, where we deal with a very vast number of cases.

292. At both those hospitals?—Both those hospitals.

293. If any man or boy enters the navy, I suppose he is examined at once?—Yes, most strictly.

294. But in those cases no special test for venereal diseases is applied to him?—No, none except the visible signs.

295. And throughout a man's service he is under constant medical supervision?—Constant.

296. Is concealment of venereal disease a naval offence now?—It is practically a negative quantity altogether. I do not suppose there is one per thousand conceals the disease now. It is an impossibility for them to do so really, because they are so strictly examined. A man is examined when he is drafted to a ship; therefore, he knows he will be detected; so practically they all come.

297. So we may take it all diseases of these kinds in any active form are certain to be discovered, and included in your figures?—I think absolutely.

298. Referring to the figures you have kindly given us, I see you differentiate under four heads, dealing with these diseases, chancroid, syphilis, 1 and 2, and gonorrhœa?—Yes.

299. Is chancroid sometimes known as primary syphilis?—No, chancroid is what is called a local infecting sore. It does not lead to any subsequent constitutional symptoms.

300. The same as chancre?—No.

301. Soft chancre?—Yes. Syphilis primary is what is called the hard chancre, which is the infecting sore.

302. Then you deal with soft chancre primary and secondary syphilis and gonorrhœa?—Yes. Gonorrhœa includes its sequelæ, gonorrhœal rheumatism, gonorrhœal arthritis, gonorrhœal neuritis, and so forth. They come under the same head.

303. Have you discharged men when they are still in an infective state?—Of course you do finally invalid a man out of the service sometimes in an infective state.

304. Still infective?—Still infective; that is to say, if you cannot cure a man, he is invalided out of the service. Of course, you try your best to cure him. Naturally, it is to the interest of the service to cure a man and keep him effective; because most of these men are highly trained and valuable men, and you cannot afford to dispense with their services. But if you come across a special case of secondary syphilis or

constitutional syphilis, which is incurable after many months—we keep them many months—we discharge them to the shore.

305. And if a man's period of service elapses, and he is discharged by lapse of time, is he then allowed to go out when he may be in an infective state?—Yes. You cannot keep him if he likes to go. Directly a man's service expires, we have not the power to keep him.

306. Do you think it would be possible to take powers to keep a man, even when his time has expired, if he is infective?—We have not the accommodation that could deal with it.

307. I see that your returns do not include other diseases which are venereal in their origin?—Such as general paralysis of the insane, and locomotor ataxy.

308. Yes?—No. The nomenclature of the diseases does not show that; and I believe I am right in saying that the Committee sitting now for the usual routine of correction of the names of diseases will not accept them as specific diseases. In fact I am informed that was decided a fortnight ago. They are still sent in as diseases of the nervous system. Is that not so, Sir Malcolm?

309. (*Sir Malcolm Morris*.) I did not know that. Where was it decided?—At the Committee that sits for the revision of the official nomenclature of diseases.310. (*Dr. Mott*.) Is that a Departmental Committee?—It is a large committee that sits for the revision of what is called the nomenclature of diseases every ten years.(*Dr. Newsholme*.) May I say that the College of Physicians has a series of meetings once in ten years to revise the official nomenclature of diseases, which is used by all practitioners speaking English, practically, and I gather from the witness that that committee has decided at its last meeting that they will not include G.P.I. and locomotor ataxy among syphilitic diseases.(*Witness*.) That is it.311. (*Chairman*.) But all such diseases are of course entered in your hospital returns?—To a certain extent they are. We invalid a man for insanity and, of course, insanity is a very broad term. The only cases that we admit into our institution that we have for dealing with insanity are differentiated into G.P.I., delusional, insanity, melancholia, and whatever the case may be; so that to a certain extent we know the number of cases of G.P.I., but we cannot trace all of them.

312. You probably would not be able to give us any figures of value?—No. I looked and tried, and could not find that we could.

313. It seems that the number of men in the navy has very largely increased of late years, and from our point of view it is the incidence per thousand which is of the greatest importance. Does the return of the cases you have given us include duplication, or do the figures relate to separate cases?—They refer to a certain extent to duplications. That is to say, if a man is discharged from hospital or from a sick list on board as cured, and he gets a recrudescence of symptoms in six months' time, he is re-entered as a

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fresh case, and he is shown as a fresh case. On the other hand, if we have a man under Salvarsan treatment or neo Salvarsan, and discharge him to wait the second or third dose as the case may be, when he comes in that re-admission is not counted a case; so that the counted cases are the relapsed pure and simple. I may say relapses are not many, and for this reason, that we have a very high standard in the navy as regards what we call a man fit for duty. A man must be fit for duty under any circumstances in any part of the world, and therefore we cannot discharge a man who has not lost all symptoms whatever of the disease he is suffering from; it does not matter whether it is a venereal disease or anything else. So that the number of relapses is not very great. As a matter of curiosity this morning I worked out for last year the relapses of a body of 5,000 men at one of our barracks as regards venereal disease, and I found that out of 435 cases of venereal disease, there were 15 only that were re-admissions—relapses. That is less than 4 per cent., and I take it that is a very fair average.

314. You think you would regard 4 per cent. as representing the probable error in your figures arising out of duplication?—Yes.

315. From 1905 to 1912 there was a diminution from 121.49 to 105.95 cases per thousand. Do you think we can regard that as due to any diminution in the prevalence of diseases in the ports which are frequented by sailors?—I do not think there is any diminution. I think it is largely due to the educational matter which we are now giving the whole of our sailors.

316. You think it is more due to that?—I think so. Of course it is difficult to say, but it is a very curious thing. I can tell the members of the Commission that some two years ago, as a tentative measure we sent round a medical officer, who is a very able lecturer, to lecture the seamen at all the ports upon hygiene generally, not only upon venereal diseases, but diseases due to alcoholism, and diseases due to neglect of taking proper care in the tropics, and so forth. It offered such great hopes of success that since that time, for the last eighteen months or two years nearly, on every ship every medical officer gives a health lecture, so that every man on every ship attends a health lecture once a year. I have a copy of that health lecture here. It is a confidential document; but I have no doubt my Lords of the Admiralty would be glad to give it to you. In that lecture the whole thing is put in very plain language. We certainly think that is beginning to bear very great fruit indeed, and we have great hopes of it.

317. Of course that is all very important from our point of view, and I think it would be very useful for the Commission to be furnished with a copy of that lecture, if the Lords of the Admiralty will give it to us?—I will apply to them.

318. (*Canon Horsley.*) No doubt these occasional lectures are very good. But do you follow it up by a leaflet given to the man when he leaves the sick bay, for example?—No, we do not.

319. Would not that be a good thing to do?—I do not think a bluejacket would take much notice of a leaflet.

320. But he may not get to the lecture at all; he may be abroad?—But the lecture goes on on every ship in every part of the world.

321. Once a year?—Once a year. Every man attends once a year wherever he may be.

322. (*Chairman.*) May we assume that infection occurs generally at the seaports?—Yes, you may say in nine cases out of ten.

323. When a man returns from long leave, he will be medically inspected at once, will he?—No, he would not be, unless he is drafted from one ship to another.

324. So that it is possible the disease may in some cases be contracted at other than seaports?—Yes, and undoubtedly it is.

325. Turning to your figures, I see in the Australian station there is a sudden fall from 196.9 in 1907 to 103.27 in 1910, and I see you note that certain changes were made in New South Wales at that time.

Will you tell us what the nature of the Police Offences Amendment Act was?—I have the report here. The first is the Prisoners Detention Act of 1908, New South Wales, which came into force on January 1st, 1909, by which certain prisoners whom the gaol surgeon certifies to be suffering from venereal disease may be detained in a Lock Hospital until free of such disease. The second Act is called the Police Offences Amendment Act of 1908, New South Wales, which, *inter alia*, imposes penalties on any prostitutes who solicit or importune for immoral purposes any person who is in any public street, thoroughfare or place. Those are the two enactments in New South Wales.

326. Do you think there is any connection between the fall in the figures and either of those Acts?—It is difficult to say, but I am rather doubtful. The only point that makes me rather think there may be something in it is this. We find that our men tell us invariably almost where they contracted the disease, and there is a curious circumstance. Only two days ago the surgeon who deals largely or entirely with the Salvarsan treatment at Chatham and who has done so for the last two years, stated to me that at least 80 per cent. of the cases, or I think he said 90 per cent., the men said came from their frequenting two public-houses in Chatham. It is quite possible that the same thing may hold good in New South Wales, and the police may pay special attention to those houses that are told them. That is the only connection. Otherwise I cannot think that the two Acts can really have reduced it. It may be only a spasmodic drop in the statistics which people who deal with statistics are accustomed to see.

327. Is it really usual for the seamen to tell the surgeon?—Yes, they tell us everything.

328. After 1910 the Australian figures went up again?—Yes, to a certain extent.

329. Which rather bears out your view that there was not much effect by those two changes in the law?—Yes.

330. Then the Mediterranean stations seem to give relatively low figures?—Yes.

331. Can you suggest any reason for that?—Gibraltar is probably one of the commonest ports of origin of Mediterranean venereal diseases; and there I believe it is still in force that if prostitutes are found to be diseased, or if they are reported to the police, they are expelled into Spain.

332. That does not prevent infection apparently?—It prevents the spread further, after they have once been detected.

333. (*Canon Horsley.*) The population of Gibraltar is very small, of course?—It is 20,000 to 25,000.

334. Therefore they would not have the same proportion of prostitutes?—They have a very large number in proportion to the total population.

335. (*Chairman.*) Do you think in places where the men get plenty of healthy exercise on shore, there is less prevalence of disease?—Yes, undoubtedly, and in their barracks. The great thing we are aiming at is to keep the men in barracks as much as we can; that is to say, we have amusements, gymnasiums and things like that, so that they do not go outside at all. They have just as good an evening's amusement in their theatre in barracks, as they will have in the theatres and the low music-halls in towns.

336. Do you think the men take advantage of that?—Undoubtedly.

337. Looking at the table of invalids, they seem to show a satisfactory fall per thousand, which begins rather sharply after 1907. What reason do you assign for that?—I should think the improved methods of treatment.

338. Then you give separate columns for the home station and home fleet after 1908. Would those two fleets have different or overlapping sources of infection?—Overlapping practically. The reason of course why we differentiate is this: we wanted to know the actual condition of our big establishments ashore and our ships in harbour, and to see whether they differentiate much in the way of health from the sea-going ships, so we wanted to distinguish the two in the home waters, which gave us a very good parallel

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as to which was more unhealthy than the other. That is the reason we have differentiated. But as regards the two venereal diseases, their source of origin would be practically the same.

339. Then the whole of those sources, that is the sources which would deal with the home station and the home fleet, would be in the United Kingdom?—They would all be in the United Kingdom.

340. Taking the home station and the home fleet together, we get 209 cases per thousand. Of course that is a far higher ratio than that for any other single station?—No, not 209.

341. That ought to be divided by two?—Yes.

342. That would be the comparative rate?—Yes.

343. It is 104.54?—Yes.

344. So that that is fairly low compared to some?—Yes, that is fairly low. That is during 1912 only. Before that it was very considerably higher.

345. The return for the Atlantic fleet stops in 1911, of course?—Yes, that is because we have no Atlantic fleet.

346. But that is fairly high?—Yes; it includes Gibraltar, and ports in Spain like Vigo and Corunna.

347. The returns in the Mediterranean seem to be low. Can you assign any reason for that?—I think there are far less prostitutes, taking them altogether, in the Mediterranean than any other station we have. There is far less opportunity, I think. I have spent many years in the Mediterranean station—18 altogether, I think—and I should say the opportunities and the number of prostitutes at the ports we go to are far less than any other station we have.

348. So that it is a question of the number of prostitutes being there?—Yes, I think so. I think it is a case of opportunity.

349. China, I see, for the last four years is the highest of all. The year 1912 was a bad year. Is there any reason to think there is increasing prevalence in the China ports?—It is almost impossible to say. We cannot draw any deductions from the Chinamen. We can never get behind their mind at all. We can never get into their domestic or any other arrangements really. We are groping in the dark as regards statistics dealing with China.

350. Does the North American and West Indian fleet visit other than British ports?—The West Indies, Halifax, and Bermuda.

351. The British West Indies?—Yes, entirely; practically none other.

352. No foreign ports?—No.

353. Canada and British West India Islands?—Yes, practically. Of course they do visit others, but it is very very rarely. Ninety-five per cent. of their time is spent in British waters practically.

354. I suppose you have no means of distinguishing between cases contracted in British and foreign ports?—No.

355. One of the columns I see is headed "Irregular." Does that mean men have served in more than one station?—It means men who are on passage. There is a very large number of men always on their way out to or on their way home from various stations, and they are classed as "Irregular." They go from various stations. Of course we want to find out the different diseases in different stations, as to the methods of stopping them and so forth, and we do not want to lump up the figures with men who have been through different stations in that time, so we put them down as "Irregular." They may have been in three or four different stations in as many months.

356. Would it be possible for you to supply the Commission with figures which will give them an idea of the relative amount of infection in different home ports?—No; I should not think so.

357. Would not Chatham, Plymouth, and Portsmouth give us any idea of the relative amount of risk?—I will look it up and see, but I should not think it would be any guide at all. You must remember the Home Fleet is a very large fleet now, and it travels about round the whole of England, and though the Eastern Fleet may be based upon Chatham, a very large number of the cases will be sent into Plymouth

Hospital, in the hospital ship, or Haslar, or Haulbowline. They may have contracted the disease at Plymouth, and then they will be sent into the hospital at Haulbowline. I will try, but I am afraid it will be very difficult.

358. I suppose all your naval hospitals are now equipped with the means of carrying out the most modern tests, and giving the most modern treatment?—Absolutely.

359. Are your medical officers on or before joining the service subjected to any special training as regards the test for and treatment of venereal diseases?—Not more than any other ordinary medical man will be at his medical school.

360. What facilities for testing or for treatment are carried on board H.M. ships?—The whole of the blood for the Wassermann test is taken on board ship and tested in our central laboratory at the hospitals, so no delicate tests are carried out on board ship; it is done in hospital. The tubes are sent to the hospital, and then the records are sent back to the ship as to the result of those tests.

361. Can the Salvarsan treatment be given on board ship?—No, we only give it in our hospitals.

362. Of the three syphilitic causes that you enumerate in your tables, secondary syphilis stands highest. Does that imply that chancreoid and primary syphilis are cured to a large extent by the treatment while the men are in the service?—Certainly. In the short experience we have had of the two or three years of Salvarsan, we find we do cure a very large number, the majority in fact, of our cases of primary syphilis. Chancreoid is only a local disease. I think you may eliminate that. It is really no more a specific disease than a boil is. Undoubtedly we cure a very large percentage of the primary disease and we hope to continue it.

363. Taking the various diseases, I see in every year except 1906 gonorrhœa shows larger figures than syphilis. Does that mean there is a higher prevalence of gonorrhœa?—Undoubtedly, I think it shows that.

364. You think the prevalence of gonorrhœa is higher in the ports?—Certainly, I should think so.

365. (Sir Malcolm Morris.) In these returns we have, both gonorrhœa and syphilis are included, I take it?—But I have differentiated here the diseases in the different years. That is what the Chairman is reading out.

(Sir Malcolm Morris.) That is another table we have not got.

(Chairman.) No, you have not.

366. In the table of invalidings per thousand, syphilis stands far above gonorrhœa?—Yes, far.

367. That means syphilis is more difficult to cure?—Much.

368. Or that it is the more disabling disease of the two?—Both.

369. In your figures, you give the total figures of disease and injury each year?—Yes.

370. Does the proportion of the venereal diseases stand high in relation to these other diseases?—You will see in 1905, for instance, the number of cases of venereal diseases was one-sixth of the total number of cases in the whole of the navy. The number of days lost from sickness due to venereal diseases in that year was between one-third and one-fourth of the total number of days' sickness; that is, 25 per cent. of our sickness is due to venereal diseases. The average number of sick daily is also between one-third and one-fourth, and the ratio per thousand of the days is one-sixth. That proportion runs practically right through unchanged until 1912. We have brought it down to less than one-fourth of the number of cases lost. Instead of one-third or one-fourth of the average number of cases daily, it is between one-fourth and one-fifth, and instead of being between one-fifth and one-sixth ratio per thousand, it is practically one-sixth or rather less; so that we are reducing the proportion. The fact is that the fall in our cases and in our days sickness loss is far more accentuated as regards venereal diseases than in any other diseases. It is not a general fall in the whole of the cases, but it is a specific fall in these venereal diseases.

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371. Comparing venereal diseases with other single diseases?—There is no other single disease that has fallen anything like as much. I compared it this morning, and saw it was something like five times as much as any other disease.

372. Taking all diseases that affect the navy, do venereal diseases stand high as a disabling factor in the navy?—No less than 25 per cent. of to-day's sickness is due to venereal disease.

373. Is there any other disease which is as high as 25 per cent.?—No, nothing like.

374. (*Dr. Mott.*) Did I understand you to say venereal disease was five times as much as any other disease?—Reduced.

375. (*Sir John Collie.*) What is the cause of the recent reduction especially?—We hope the educational side.

376. These lectures and so forth?—Yes. We hope a great deal from Salvarsan. But Salvarsan up to the present certainly cannot have been a factor in reducing either the cases or the number of days.

377. (*Sir Malcolm Morris.*) That, I suppose, is due to the shortness of time?—It is due to the shortness of time and to this reason, perhaps you do not know, but I do, that the bluejacket is a very funny man. He has taken it into his head that Salvarsan is a very excellent thing and that the Wassermann test is a most excellent one, and they flock voluntarily on their own account to have their blood tested and, if possible, have the Salvarsan treatment. Men whom we otherwise would not have detected, come voluntarily to have their blood tested by the Wassermann test, and therefore those men show in the number of cases and probably the days lost where they would not have shown had we not had the Wassermann test.

378. (*Sir John Collie.*) Do you mean the diminished quantity from the Salvarsan treatment has anything to do with this drop last year?—I do not think it can have yet. It may to a certain extent because, if you look at your figures, the number of days lost per case has been reduced to a certain extent and, therefore, it may to a certain extent; but it really has not been in vogue long enough for us to say. We expect a great deal from it, and I think we shall get a great deal from it; but, after all, that is curative and the other is probably preventive—the educational one.

379. Do you think the Salvarsan is preventive too in the shape of diminishing the number?—Yes; diminishing the number of secondary symptoms.

380. No, diminishing the number of sources of infection by infecting others and so forth?—No, I should think that would have very little effect. Really it is spread over such a wide area that it would be difficult to say. I do not think our men infect many, because we keep them so strictly. Even after they are cured they have to do a period of quarantine on board before we allow them on shore. We do not send our men—except these men I told the Chairman of just now who may be invalidated out of the service as incurable—to infect the general community.

381. (*Chairman.*) I suppose you have not been able to form any real opinion as to whether there is a general increase or decrease in venereal diseases?—No, I could not say in the least.

382. Does the naval experience lead you to think that syphilitic diseases are less serious in their forms than they used to be?—The results are less serious, but I think that is brought about by improved methods of treatment. I do not think there is any evidence that we have that either the diseases are less frequent in the general population or that they are less virulent *per se*.

383. (*Sir Malcolm Morris.*) May I ask a question in connection with that. Is there any difference in type at the tropical stations as compared with the home?—Yes, very great. You get much more aggravated local symptoms, such as phagedænic sores.

384. In China and India?—In China and India, the West Indies, and in the tropical portions of Australia.

385. Is it as severe as it was when you first entered the service?—I should think quite.

386. But only in tropical places?—Only in tropical places. You see, you do not see the results that I

remember 25 or 30 years ago, because we take it much earlier, and in those days there was a great deal of concealment. The fact of the matter was that in those days the men did not trust their medical officers. They had not the perfect confidence in them that they have now, and they did not go to them; they preferred to try and treat themselves.

387. In the hospitals at home is the type less severe? I do not mean the cases that have been brought from the tropics, but the cases acquired in this country?—No, I do not think they are less severe.

388. Do you think there is any difference?—I do not think so.

389. That is a statement which has been made constantly, and I wanted to know what your view was?—My opinion is that there is no difference whatever.

390. (*Dr. Mott.*) Do you think the cause of the severity of tropical syphilis is due to associated organisms through uncleanness on the part of the prostitute?—I do not think so.

391. You think it is a more virulent form?—It is a more virulent type. Climatic influences may have something to do with it; but I do not think the prostitutes are of a dirtier or lower type than they are anywhere else.

392. (*Chairman.*) Then we may take it from you that you attach very great importance to this system of lectures given to the men which tells them all about it?—Yes, the very greatest.

393. You think that the carrying out of this system will in time make an impression?—I think it will make the very greatest impression, judging as I do from the changes as regards alcoholism which have been entirely brought about by education in the navy. When I was in the navy it was quite a disgrace for a man to come on board sober after leave. Now you never see a man drunk. When I say never, very very rarely. That is entirely education. The man has far more opportunities than he had in the time I go back to.

394. That is the education carried out in the navy?—Yes.

395. As apart from the general education?—Yes, quite.

396. (*Mrs. Creighton.*) Do you consider one lecture a year sufficient?—You would not get in more. You see, a man has a very large amount of work to do, and you would not get the men for more than once a year. You must remember that the man is not there for one specific purpose; in fact, his purpose is to learn his business as a fighting man, and we certainly should not get our men more than once a year, and very naturally. I do not think we could expect it. It takes a considerable amount of their time.

397. (*Sir Almeric FitzRoy.*) I may take it these figures I have before me do disclose a progressive amelioration?—Very small until this last year.

398. Taking the comparative tables and turning to the total number of days' loss and the average number of sick daily from 1907 to 1912, there is a progressive improvement?—Yes, there is a slight improvement.

399. Is not that increased by what you have just now said as to the number of concealments in old days compared with the number of disclosures now. Is it not the case that, probably, if the full facts had been disclosed, the figures would have been much more considerable about seven or eight years ago than they are in this paper?—That might have been the case to a certain extent; but there is no doubt concealment of disease, though it may at first lead to a reduction in the figures, eventually swells them.

400. True; but I suppose you deal mostly with the primary syphilis in the navy, do you not?—No. If you look at the figures—we will take 1905 because it is the topmost figure—you will see the total number of days lost to the service for secondary syphilis was 93,830 or nearly 100,000 days. Our figures deal far more with constitutional syphilis than any other. The average number sick daily, that is every day in the navy, from secondary syphilis in that year was 257 men. That is, constantly sick every day.

401. Then as to this table with regard to the distribution of venereal diseases according to the stations of the Royal Navy, I presume it is the case

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that the first five columns represent by far the larger part of the navy. I mean, the navy is practically situated in the home and Mediterranean stations now?—At the present moment, yes.

402. So that the large figures given in some of the tropical stations do not really represent any very large number of men in the navy?—Not a very large number.

403. That has to be noted in connection with these statistics, has it not?—Yes; but spread over a number of years, as they are, and showing the same general results, really pretty conclusively proves that those figures are not very far wrong.

404. This concentration of the navy in the home stations has been going on for a period covered by these statistics?—Yes.

405. So that that has to be considered?—Yes, it certainly has to be considered.

406. I wanted to ask whether you have any statistics showing the number of infected persons who present themselves among the adult entrants into the navy; among the recruits you take in the adult stages of human life?—We take none practically.

407. Do you not take stokers?—They come in at 17 or 18. You may call those adults, but they are very early adults.

408. I mean, they are not boys?—We should simply reject them.

(*Sir Almeric FitzRoy.*) Yes; but I want to know what proportion of infected persons present themselves among those.

409. (*Sir John Collic.*) Who are rejected?—We may be able to get that from the record of the medical officers. We do not show them at all.

410. (*Sir Almeric FitzRoy.*) Quite so; but that is the only part of your figures which would really throw any light on the prevalence of the disease in the civil community, if you understand me?—No, I do not.

411. Surely, it is the civilians who present themselves as recruits to the navy who would reflect the condition of things in the civil community?—These men contract the disease from the civil community.

412. But they are sailors when they contract it?—No, but they have contracted the disease from the civil community.

413. Yes; but I want to know whether your statistics throw any light on the prevalence of the disease in the male members of the civil community?—You mean to say, whether the percentages correspond?

414. Yes?—That is to say, say 100 per 1,000 are infected in the navy; does that represent what is infected in civil life? Is not that what you mean?

415. That is the direction of my inquiry?—I think you may wipe off a very large amount. You must remember that probably these figures of the navy are far larger than the army for this reason, that we are a compulsorily celibate service practically. The country and the nation at large gives no encouragement whatever to her sailors to marry. There are no married sailors on the strength. When they collect in barracks a soldier has his men married on the strength with their wives and families adjacent; but if the bluejacket has a wife no notice is taken of her whatever. In fact, the only people who look after her are the philanthropic wives of the officers. Therefore, you will get a far larger proportion of venereal diseases in the navy than in any other body, whether civil or military.

(*Sir Almeric FitzRoy.*) Quite so; it does not touch the prevalence of the disease in the civil community at all.

416. (*Dr. Newsholme.*) I think the point was that we have before us the number of rejections of recruits for the army. Have you tables showing those in the navy?—Yes, but I have not them here.

417. They are not so commonly known as the others?—No.

418. That does show something from the general point of view of the country. You say so many years ago so many men were rejected. Assuming that we can do that for the army, cannot we do it for the navy?—I think I could get them; but I warn you that in getting those figures you are liable to very grave error. You must remember you are getting

figures of a certain age, that is all; and the numbers of the infected up to that age are very very small in proportion to the numbers infected between 25 and 30.

419. (*Dr. Mott.*) Would that apply to the stokers too?—Undoubtedly. The numbers that are infected up to the age of 17 and 18 are a very very small proportion we find—practically infinitesimal.

420. (*Mr. Lane.*) With regard to the medical officers of the navy, do you find that, on entering, they have any particular knowledge of this subject?—No greater, I think, than any other newly qualified medical man has.

421. As an examiner, I may say that is very little?—I presume this is very little then.

422. And there is no special instruction after passing?—Yes, at our hospitals.

423. Are they instructed in the administration of Salvarsan?—Yes, certainly.

424. And in the Wassermann test?—Yes, undoubtedly.

425. So that every naval officer is competent to administer Salvarsan?—No, I should not say that. We specially select men who do it, and they are men who have shown themselves in instructional courses as being the men suited for the purpose.

426. But by implication they should be competent to administer Salvarsan?—You must remember Salvarsan is only administered at about four or five hospitals, and it is the experts at those hospitals who really do it.

427. So that if a case of syphilis appears in a sailor shortly before he is starting on a long voyage, he cannot have any Salvarsan until he arrives at some station where there is a navy hospital?—Yes. In a place like Australia we work in conjunction with large hospitals such as the Prince Alfred, and other hospitals like that.

428. He has to wait?—Yes, certainly.

429. And he may have to wait three or four weeks?—Yes, he may have to. Of course you must remember in going out these men pass naval hospitals for a good long way. For instance, we have a naval hospital at Gibraltar, and Malta, and at Hongkong. And at all these places they are competent to, and do administer Salvarsan.

430. (*Sir Malcolm Morris.*) Would you take him off then?—Yes, undoubtedly; and he would be left behind there if necessary.

431. (*Mr. Lane.*) There are instances, I suppose, in which a man may be on board a ship three or four weeks without?—Yes, undoubtedly.

432. Then is the Salvarsan not administered on board ship on account of its dangers?—Yes, that is the idea.

433. There is no reason why it should not be given?—No; except that we have not the accommodation for doing it. You see, our means of putting up the men are small on board ship, naturally.

434. My experience is that it does not require very much accommodation. Patients come into a hospital in the afternoon and go out in the evening in the civil population?—Then you have your aseptic operating surgery to do it in. You run a great risk of septicism on board ship.

435. I am afraid I am practising in a place which is not very aseptic, and we have never had a casualty. We do it at the rate of 20 a week. Are there any attempts at prophylaxis in the navy by way of distributing medicaments to sailors going on shore, in the way of mercurial ointments?—We tell them in the health lectures where they can obtain these things.

436. But there is no special method of distribution?—No. They are simply informed of the best means of prophylaxis, and they have to take their own steps.

437. You are aware of the measures taken in the German navy?—Yes, quite.

438. Do you approve of them?—I think they are excellent; but there it is compulsory, you must remember.

439. That a man going on shore has to take one of these packets?—Both in the German and in the

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American navies, if a man comes off to his ship and has contracted, or shows he has contracted disease, and cannot prove he has used his prophylactic method, he is punished.

440. Do you think the British sailor would apply these remedies?—I do not think he would have the slightest hesitation in applying them. But I do not think the public would allow the compulsory clauses.

441. Then you see no objection to having these means of prophylaxis, such as they are, distributed?—Not only do I see no objection, but I see the greatest good in having them.

442. (*Sir Malcolm Morris.*) Do the patients in the navy have their histories sent on from one station to another in the same sort of way as is now carried out in the army?—Yes.

443. So that a new medical officer knowing nothing about this particular patient would know their exact history and the treatments and so on?—Yes.

444. Do sailors themselves take charge of that?—No; it is taken to the medical officer.

445. Of the next ship?—Yes; it goes with his parchment certificate.

446. So that the exact details of treatment from the beginning to the end are absolutely faithfully kept?—Practically now; and to make it more certain still we are going to introduce a separate venereal sheet.

447. That has not been so up to now?—No; it is on the general sheet up to now with instructions that notes are to be given of the necessary treatment with regard to venereal disease. But the Admiralty have it under their consideration at this present moment that a separate sheet entirely should be used.

448. So that exact details could be put in?—Yes. Ever since Salvarsan has come in we have recognised we must do that.

449. Are there means for carrying out Wassermann's tests in every port where a person arrives?—Yes, in every port.

450. So that if a case has had injections in England and arrives in Australia, a Wassermann test would again be done?—Quite so.

451. When there is a case that has been a fairly bad one, and has recovered, does that have a Wassermann before he is let loose on the civil population?—Yes, certainly.

452. At the very end?—Except, as I say, that we do not keep men that we have invalided out of the service.

453. I did not quite catch that?—Suppose a man is under treatment, and we cannot cure him; we will say a general paralysis of the insane man, or locomotor ataxy, or a man with extensive ulcerations and very advanced symptoms of syphilis, and we have come to the conclusion that we can no longer make him fit for active service. We invalid him out of the service, and though he was infected, we put him out amongst the general public, undoubtedly.

454. You do not see any scheme by which that could be modified?—Not without very large expenditure in the way of hospital accommodation.

455. That would make the navy practically responsible for the treatment to the end perhaps?—To the end.

456. What is the percentage of this sort of case in the navy; have you any idea?—No, I have not. I should think very small.

457. It is small?—Very small. It may be represented possibly by the invaliding ratio.

458. What about new naval bases? For instance, there are new naval bases in Scotland, are there not?—Yes.

459. Is there much infection there?—I cannot say that with any certainty. Scotland has always borne rather an unenviable notoriety in certain ports; for instance, Dundee, and places like that.

460. When was Dundee made a naval base?—It has never been made one, except that ships call there.

461. It is a naval base to-day?—It is to that extent. All the ports on the east coast are naval bases to-day.

462. Was there much syphilis in Dundee before it was made a place of call?—I think so. I think we

always used to get a considerable number of cases from there when ships visited there.

463. That was so, was it?—Yes.

464. Has that increased?—That I cannot say.

465. Have you had difficulties with the use of Salvarsan—dangers?—We have lost two cases. Do you not think, my Lord, it would be better to put off the question of Salvarsan until later. I am not prepared with figures.

(*Chairman.*) I think perhaps it would be better.

(*Witness.*) I propose, if the Chairman will not mind, to send one of the experts who has administered all the Salvarsan during the last two years.

466. (*Sir Malcolm Morris.*) I quite agree, and besides, the whole thing has been so quick that it is quite impossible. Of course, we want accurate results of Salvarsan in the navy, the same as we have them in the army?—We can give them to you.

467. You can give them to us later?—Yes.

468. Do you know at all the relation in percentage between alcoholism and the acquirement of syphilis?—No; I cannot give you any figure at all. It is supposed to be high.

469. Is there any record kept of the cases in which men have been known to be addicted to bouts of alcohol on their records?—The number of cases of men who are addicted to alcohol are very very small in proportion.

470. And in spite of the reduction in the amount of alcoholism, there is still a very large percentage of syphilis?—Enormous.

471. So that the mere fact of taking away alcohol, if it were to be a negligible factor, would not take away syphilis?—I should think it would hardly reduce it in the least, so far as the navy is concerned.

472. Have there been any cases in the navy of ships in which there have been accidental infections?—Yes, undoubtedly, medical officers especially.

473. Can you give us any statistics about accidental infections?—No, I am afraid I could not; they would be scattered about. But there are undoubtedly cases cropping up.

474. Do medical officers get chancres on their fingers, and so on?—Yes.

475. Have there been cases also of infection from other accidental causes, such as the infection of glasses?—Yes, undoubtedly; and a man wearing another man's clothes, and using his towels.

476. Occurring on ships, I take it, rather than on shore?—Yes.

477. Can we get any sort of idea as to the proportion of accidental infections?—Of course it would be a very very small percentage.

478. In numbers?—Very small. Going back over the figures I made out in the year, probably not two a year at the outside.

479. Over the navy that amounts to a good deal? That would be two out of a total number of cases of 13,000.

480. Are they taught in these lectures of the risk of accidental infection by secondary symptoms?—I think it is mentioned there.

481. I take it the male nurses as well as the doctors get infected at times?—Yes.

482. Do those forms of syphilis run a different course to the ones contracted in the ordinary way?—On the whole I think they are inclined to be more virulent in their effects.

483. That is my experience in the civil population. Do they run rather to nervous types than to cutaneous types?—Yes, undoubtedly they do.

484. That coincides with my own personal experience?—Of course, owing to the way in which it is contracted, it must be a shock to the system, a great deal more than the other way. A man who is infected in that way, naturally must be affected mentally a great deal more than if it is his own fault.

485. Do you think there are further means that might be adopted that would prevent the accidental infection?—I do not think so. I think we take every precaution. I think there always will be accidental infections.

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486. In the case of the medical officers and nurses examining personally these discharges, do they wear indiarubber gloves or anything to protect them?—They can if they like. It rests with their own discretion. They are there for them to wear.

487. (*Mrs. Creighton.*) You said that these cases of incidental infection were liable to be more serious than others; but cannot they always be taken very early?—No. As a rule a man does not know he is infected until the secondary symptoms appear. Naturally he has no suspicion. He has not committed himself in any way. He has a sore on his finger which he takes as a matter of course as something else, and until a secondary eruption occurs he does not suspect anything.

488. Does not that point to how a warning might be given to them as to sores?—The people who are infected are mostly men who have knowledge of the subject. That is to say, medical men and nurses, and they are quite cognisant, without warning, of the dangers.

489. Then you spoke about these men who are discharged invalided. Are they told why they are discharged? They know they are infectious?—Yes, perfectly.

490. You say you have no figures to tell us the proportion of those men?—I take it the figure here of the invalidings ratio would very much express the men who have still active symptoms. The ratio per thousand of invalidings is 1·87.

491. And you think practically all those would be invalided for that cause?—We will take the last year. The last year gives a ratio of per thousand of invalidings of '69 for secondary syphilis, and '48 per thousand for gonorrhœa.

492. Was I right in gathering from what you said that men who were known to be diseased were not allowed on shore until they were cured?—No man is allowed on shore as long as he is on the sick list, and further, a venereal case is not allowed on shore until eight days have elapsed since he has been absolutely cured; and he is examined every day to see whether he can be allowed to go.

493. I was told the other day that naval men who had been on shore were now sent to the sick bay the moment they returned and were examined to see if they had contracted disease. Is that so?—No, that is not true.

494. Then you said that you would be glad if it were possible to introduce the habit of supplying these men with methods of prophylactic treatment before they went on shore. I suppose you say that purely from the medical point of view rather than from the moral?—Entirely. We have nothing to do with the moral point of view whatever.

495. I wanted to have that clear. Then you spoke of these two public-houses in Chatham where disease was so commonly contracted. In a case like that, are the police communicated with to try and specially deal with those public-houses?—No, not so far as I know. We take no steps.

496. It would not be within your power?—It would not be within our province. In the old days it would have been, but not now.

497. (*Dr. Mott.*) You mentioned a Hunterian chancre, a soft chancre or chancreoid. You recognise that a good many cases of syphilis are characterised, not by the Hunterian chancre, but simply by chancreoid. Have you determined whether these particular cases are more likely to have serious sequelæ than the hard chancre?—The poison of chancreoid is not followed by any constitutional sequelæ at all. It is a local infecting sore. It is as distinct from a Hunterian or hard chancre as measles is from mumps, and therefore the local infecting sore is not followed by any sequelæ.

498. I meant that; but there are a great many cases, at least according to my experience, in which it has been called a soft chancre, but which has afterwards been found to be syphilis?—That is a mixed infection.

499. But you recognise the difference between the two?—A mixed infection is a case where you have

primary syphilis with the chancreoid. You have both Hunterian and chancreoid.

500. What I mean is, would these mixed infections be likely to be missed?—It is possible a mixed infection may be missed until you get constitutional symptoms.

501. Yes, constitutional symptoms may not come under observation?—I think the number of cases of constitutional symptoms which do not come under observation are small. You must remember that whether the man has hard chancre or a soft one, he is constantly under observation twice or three times a day until it is cured.

502. You do not think it is possible?—It is practically impossible to miss a constitutional infection.

503. One finds that cases of general paralysis are particularly remarkable by the fact that the primary sore is often very slight indeed, and the constitutional symptoms very modified?—Yes.

504. Skin eruptions are very rare indeed. I am speaking of a very large experience of 600 post-mortems, and I have been struck by that, because I have noticed that marked skin eruptions and tertiary lesions occur in relatively only a few cases of general paralysis, but general paralysis does not come on till 10 years after infection?—Yes, and not only that; but, after they have been discharged from the navy, and our age of discharge is about 42 or 43.

505. That is what I was coming to. So that practically this figure does not represent anything like the proportion?—No, nothing like.

506. Of course, in going through the histories of cases of general paralysis in the asylums, I have often found a great many have been in the navy?—Those numbers in the first place only represent the numbers that have been sent to Yarmouth.

507. I understand that. Those men are only the pensionable men. Any man who is discharged before 30 years' service is not sent to Yarmouth. There is no doubt we discharge a great many men before they have time to show manifestations of G.P.I.

508. I wish to emphasise that, because this figure seemed to me very small indeed?—Yes, it was a figure that was only put in as an afterthought and not as a guide at all.

509. Then you have "D.D., ditto, ditto." What is that?—Dead.

510. Then with regard to re-infection, have you met with any cases of re-infection?—Undoubtedly.

511. Have you met with more since the Salvarsan treatment?—It is difficult to say. We rather think we have; but it is too early.

512. A paper was recently published by a German showing a considerable number of cases of re-infection after Salvarsan?—Of course you would naturally expect it.

513. That shows the value of the treatment, does it not?—Yes.

514. I suppose you would admit that the only proof of cure is the possibility of re-infection?—Yes.

515. (*Canon Horsley.*) Going back for a moment to the question of those particularly poisonous and vicious public-houses in Chatham, do not you think it was the duty of the admiral in command there to report those to the police?—The admiral in command knows nothing about it.

516. Somebody, we will say?—We will say the medical officer of the hospital.

517. Yes?—No, I do not think so. Any communication with regard to diseases on shore has been strictly forbidden as far as we are concerned, ever since they have done away with the Contagious Diseases Act.

518. The police have the offence of harbouring prostitutes as a separate item?—That has to do with the civil population, not the naval population.

519. If I, as a private individual, were to report that to the police, they would ascertain it and necessarily take action?—I am afraid I would not consider it the duty of the medical officer. It does not seem to me to be his province.

520. Do not you also know that in the parallel case of the army, the officer commanding the district would put those public-houses out of bounds if that informa-

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tion were brought to him? Is not there a similar power in the navy?—Yes, the navy could put them out of bounds.

521. Then why are not those put out of bounds?—I was only informed of it two days ago. A report might go down to the admiral.

522. It is the obvious thing to do. You know the most serious complaint affecting your men arises from a certain spot. The only thing is to deodorise that spot?—We warn the men not to go there.

523. Yes, but the police when informed are ready to take action. I am speaking of Woolwich, where I have known certain houses to be put out of bounds for the soldiers. Surely the same thing could be done here. I am afraid the net result of all the figures you have given us to-day is, that the morality of the navy is considerably worse than that of the army?—It is a very difficult thing to compare the two. In the first place, you must be certain you are comparing the same figures. We have no such thing as an attending list. Our men are well or they are unwell. They are fit for service, as I said, under any conditions in any station in the world, or they are unfit. We have no such thing as an out-patient list. I do not speak with knowledge, but I believe the army have a considerable out-patient list which does not appear in their returns, and therefore you are not comparing like with like.

524. But the army would never in any category bring out 25 per cent. of sickness as due to this?—I am not competent to deal with the army figures.

525. According to the figures one has of all the army returned in India and everywhere else, I do not think there is anything so bad as that. Have you made any comparison between the English navy and other navies in that respect?—We have the health of other navies, but we are not able in the least to judge the figures they are based on.

526. We have tables comparing the British army with the German and the French, and very much to the discredit of the British army, I am sorry to say?—I am afraid you cannot take as gospel the statistics of foreign nations.

527. In the German navy there is complete and careful and ample instruction systematically given. Do you think the word "systematically" is covered by only one address once a year?—Every man has to have that address.

528. Once a year?—Once a year.

529. But I rather apprehend the word "systematical" in the German navy means more?—I should not think so.

530. I believe you have nothing corresponding to giving a man that sort of thing in a leaflet, such as is given to every person leaving Guy's Hospital. That seems to me to be such an excellent thing, and I believe it is not done in many hospitals. It simply shows that you are suffering from syphilis, and that this is what you ought to look out for. It is a paper of warning. Just as when we go to a place where there is scarlet fever or smallpox, and give them a little document showing them what they ought or ought not to do?—Of course a man is told that in his lectures. My experience of the bluejacket, and it is an experience extending over 30 years, is that he lights his pipe with most of these pamphlets. If you give him a good talking to—and he has the greatest confidence in the medical officers—he does what you tell him; but he is a funny man, and you must have his personal confidence. You will not drive him with these pamphlets. There is no harm in giving them to him; but I am afraid you would find his pipe would consume them.

531. With regard to Chatham, I happened to be near there and addressed the bluejackets the other day. Is there a considerable amount of immorality among the wives of sailors in Chatham?—No, I should not think so, more than among the wives of the civil population.

532. It is said sometimes it is so?—I should think it is a libel.

533. Of course, they are in a worse position than the wives of soldiers; they are not on the "strength"?—No.

534. It is left entirely to the married sailor whether he will give any money to his wife or not?—Yes; but to say there is any general immorality among the wives of sailors is a gross libel. My wife goes a great deal among the wives of sailors, and she would know.

535. At Chatham?—Chatham, and all the ports, and I should say it was an absolutely gross libel.

536. I hope it is so, but I have heard it. Of course they are in a worse position than the wives of soldiers?—The nation does not recognise them.

537. Therefore the temptation is greater?—No, I do not think so.

538. Are naval chaplains expected and encouraged to address the crews as to the manliness of purity and the unmanliness of fornication?—I do not know, but I should think so. I am afraid it is out of one's duty.

539. Still, I take it, regular exhortation is desirable?—Undoubtedly.

540. But you do not know to what extent it is done. You have in some places a special ward for these diseases?—Yes, we have them in all our hospitals.

541. Are the chaplains expected to go in that particular ward?—They go into every ward. We have a chaplain in each hospital and he goes into all.

542. Do you know whether there is any special direction that they should supplement your efforts?—I think it is left entirely to the chaplain.

543. What is left entirely to a man is not always done?—My experience of the chaplain is that he does his work thoroughly and conscientiously in the hospital.

(Canon Horsley.) The only thing is in the case of such a special disease you want to have everybody make special efforts against it, not only the doctors.

544. (Rev. Scott Lidgett.) Are you aware that in the case of the army very special co-operation has been arranged between the chaplains and the medical side upon the particular point that Canon Horsley has just referred to?—No, I am not. I do not know the army.

545. And that the Secretary of State for War has taken a very strong initiative on that line?—No, I do not know in the least.

(Rev. Scott Lidgett.) And that that is supposed to have borne excellent fruits in the Indian army also. Most of the questions have been asked, my Lord, but there is one I want to put to you if I may. We understand that we are to have this lecture supplied to us?

(Chairman.) We hope so.

(Rev. Scott Lidgett.) Shall we have an opportunity of asking this gentleman any questions that may arise upon it?

(Chairman.) Certainly. If any special questions arise we will take evidence upon it.

(Witness.) I may say it is confidential, and I must get the approval of the Admiralty.

546. (Sir John Collie.) Do you find this plan of treating all cases of gonorrhœa with a rest in bed diminishes the risk of such complications as sterility, stricture, and bubo? With the civil population gonorrhœa is not treated with a rest in bed; but I take it all your cases are confined to sick bay?—Yes the whole of them.

547. Is it your experience that the complications are generally in consequence very much diminished?—Of course it is difficult to say, because we have nothing to compare them with. We do not treat the civil population, so we cannot say the number of cases of sequelæ of gonorrhœa which follow in the civil population. The number that follow with us is not very large certainly. If it is large amongst the civil population, certainly the rest in bed is good.

548. It is certainly very large. When you get these new syphilitic registers, I take it, you expect a definite diminution in the secondary and tertiary stages?—Yes, we hope so.

549. With regard to the men who are discharged suffering from venereal disease, I think you said there would be grave difficulty in looking after them, because of the considerable amount of accommodation that would be required. Then you also said that the proportion per

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thousand is very small. It is 1·87; but the aggregate is very large, is it not?—No, I do not suppose so. Of course it is difficult to say. One could calculate it.

(*Sir John Collie.*) If it is 1·8 per thousand over the whole navy—

(*Chairman.*) There are 119,000 men at the present moment.

(*Canon Horsley.*) That would come to about 300.

550. (*Sir John Collie.*) It is smaller than I thought it would be?—If you had to put up 300 men per annum every year in your hospitals, you would have no hospital accommodation very soon for your active service men.

551. I quite appreciate that; but I am looking at it from the other point of view. You appreciate the immense importance from the civil population point of view of some consideration being paid by His Majesty's Government to these cases?—Yes. Of course, as a rule, we keep them as long as we possibly can after they are invalided to try and cure them, or try and make them, at any rate, non-infective.

552. Of course, you use the hyperdermic injection methods for syphilis in the navy?—You mean for mercury?

553. Yes?—Yes; we use various methods. It is varied according to the nature of the case.

554. I wanted to gather from you whether you thought these hyperdermic methods were really found in practice to be more effectual than when you put reliance merely upon the patient's good faith in taking the medicine regularly?—I think, my Lord, that that comes under the case of treatment.

(*Chairman.*) Yes.

555. (*Sir Malcolm Morris.*) It has reference to the Salvarsan treatment?—Yes.

556. (*Mrs. Burgwin.*) You said the health of the men is better in the Mediterranean, because there are far less prostitutes on the Mediterranean than any of the other places?—That is my own idea. Of course, I have no figures to show.

557. I think you went on to say that the prostitutes were expelled from Gibraltar?—Yes.

558. How are they expelled from Gibraltar?—They are not British citizens; they are Spaniards. Gibraltar is a fortress, and nobody is allowed to live there unless he is a British citizen, or has a monthly pass. The pass is not given to them, and they are not allowed to live in the fortress.

559. Then I notice you said the men know where treatment is available for them, go voluntarily for it?—Yes.

560. So that it follows if treatment were provided generally, people would go?—I do not think that follows at all. I do not think you could infer from what the bluejacket does, that the general population would do the same.

561. (*Sir Malcolm Morris.*) Do you think they would be less likely? A. I think they would be less likely.

562. (*Mrs. Creighton.*) Then you think there is no concealment in the navy?—Practically none, you may take it.

563. (*Mrs. Burgwin.*) You said a great deal of the concealment had disappeared now because of the treatment which was offered to these men?—I think the fact is now that the men have the most absolute confidence in their medical officers, and they know if they go to them they will be treated properly.

564. I am not quite clear on one point; that is, the comparison between the German navy and our own. As Canon Horsley said, ours comes out badly; but is it not a fact that in Germany there is a compulsory notification of this disease, and punishment if it is not notified?—I do not know whether there is compulsory notification, but there is compulsory use of prophylactic measures. I think you would be foolish to compare statistics of foreign nations with ours. I have dealt a great deal with statistics of armies and navies, and I have come to the conclusion that you cannot till they are based upon the same premises; therefore they are very likely to be quite unreliable as a method of comparison.

565. It would not be at all fair to say our navy was worse?—No; not from the figures Canon Horsley quoted. You must go into the details first.

566. With regard to the infected persons that are discharged, if there were notification, then of course we should know, should we not, and they would have to be treated?—There is no law in civil life that I know of that compels a man to be treated. You may know he is diseased, but you cannot compel him to be treated, I take it.

567. My point is this: it seems to me so weak for one part of our organisation to say "I have done with the man," and turn him out an infected person, and allow him to go wherever he likes. It seems to me if we had notification those persons would be caught in the net all right?—I do not know whether notification would make him go for treatment necessarily. You would know he was diseased.

568. I will not go into that. It was a point in my mind?—We would have no objection whatever as far as the navy is concerned, to notifying every case. We notify every case of tubercle, for instance, that is discharged, to the medical officer of health of the district he goes to; and we have no objection in the least to notifying the cases of syphilis that we discharge.

569. Of course you do get a far better educated boy into the navy. He goes about longer than he does to the army?—We educate him ourselves.

570. But surely he goes about a better educated person than he was?—I do not know.

(*Canon Horsley.*) Not if you include a training ship under the head of the navy. It is a matter of stature and physique whether a boy goes into the army or the navy. The only thing is that in the navy he goes to the training ship, and has that very good education, and in the army he does not.

571. (*Mrs. Burgwin.*) But we have had compulsory education since 1870, and therefore the candidates coming for the navy must be a better educated lot than they were?—Before 1870?

572. Yes?—I would not say so. We get a very high class of boy, you must remember, and they are the class of boys who were educated long before 1870. We get a far higher type of boy into the navy than they do into the army.

573. I have always understood that. I have heard Dundee so often quoted, and you have confirmed what I have been told. Have you any idea why prostitution should be so very common in Dundee?—I do not know that it is very common there. I mean to say we get a good many cases from there. They may be a very bad type of women, or something.

574. It is a factory town, and very often they are very poorly paid women workers. You think that might account for it?—Yes. I do not think it is worse than any of our other ports, in a way.

575. I thought you said so?—No. I said a very few cases came from Scotland. I only mention Dundee because it came to my mind. I do not think it is worse than any others.

576. (*Dr. Newsholme.*) Taking the number of sick, there has been a decline from 121 per thousand in 1905, to 106 per thousand in 1912, as shown by the official figures?—Yes.

577. I gather that you express no opinion as to whether venereal diseases have diminished in amount in the navy or not?—The figure shows that they have diminished.

578. I must have misunderstood you then. You state that venereal diseases have diminished in the navy during that period?—Undoubtedly. We show a very large reduction.

579. One of the most important influences in causing that decrease, I understood you to say, was the educational measures?—That we think, and we hope.

580. Have you any figures of gonorrhœa as separate from syphilis?—Yes, they are all here.

581. Do they show any decrease?—I will read the figures for 1912 and 1905 for gonorrhœa. The 1905

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figures show a total number of cases of 6,884, or perhaps it would be better not to take the total number, but the ratio.

582. If you please?—The ratio per thousand of the cases of gonorrhœa in 1905 was 62.

583. And in 1912?—57·61. That, spread over 120,000, means a very large amount.

584. So that both as to gonorrhœa and syphilis there is evidence of decline in the prevalence of those diseases?—Perhaps what shows the decline more than anything is, that the total number of cases in 1912 on a larger body of men, that is, 119,000 against 111,000, was 12,667 in 1912 against 13,490 in 1905. The number of days' sickness was 269,210 in 1912, and 333,313 in 1905. The average number of sick daily in 1912 was 735, leaving out the decimal figures; and in 1905 it was 913. That is to say, you have reduced your daily number of sick by about 180 men, and your average strength, as I say, is 8,000 to 10,000 more.

585. So that in your opinion there has been a distinct decline in the prevalence of venereal diseases in the navy in the last 10 or 15 years?—The great decline has been in the last year. The other was slight.

586. (*Sir Malcolm Morris.*) Is that decline the result of the number of days in hospital?—Both the number of cases and the number of days under treatment.

587. You said just now it was 25 per cent. of the total. Is that a great reduction of the total illnesses, say from 10 years ago?—The total number of diseases have not fallen in the same proportion as the venereal diseases have fallen. There is a far greater fall in the proportion of venereal diseases than in the total number of diseases.

588. (*Dr. Newsholme.*) With regard to the table of the number of days lost, may not the striking diminution in the year 1912 be due to the better methods of treatment rather than to a very much greater decline in the total amount of disease?—It may to a certain extent; but, as I told you just now, there is a factor that has led up to increase in the number of days instead of a decrease; that is, that the men are pressing for the Salvarsan treatment, and the disease in those cases would not have been detected had they not come of their own free will, because they had no evident symptoms.

589. Then I notice in your report for 1911, that of the total 13,461 cases of venereal disease, 658 had primary syphilis and 2,959 had secondary syphilis. That is a somewhat high proportion of secondary to primary syphilis, is it not?—They will vary, of course, from year to year, because it does not necessarily follow that those 2,959 cases have been derived from the 658. The disease has been extending over some years.

590. But I think you hope that the proportion of secondary to primary will very much diminish under the new methods of treatment?—We think undoubtedly; but the new methods had not taken effect in 1911.

591. With regard to securing any diminution in the proportion of secondary syphilis, you attach a great deal more importance to teaching the men to come for early treatment as tending to reduce the number of secondary cases?—I think the men come directly now. I do not think there is any delay in their coming.

592. There is one other point in your Annual Report. I notice the proportion of venereal diseases per 1,000 of strength was higher in the home station than any other stations except the China station. The figures for the home station were 131, and for the China station 147½ in 1911. Do you regard that as indicating that there is more venereal disease in the civil population in the home ports than in the foreign ports, or is it partly that and partly opportunities of infection?—It is very difficult to say. I think you could read the conclusion in your own way. The fact remains that in our home stations the incidence of disease is undoubtedly higher than the average total of the force.

593. You mentioned the point as to the discharge of sailors who were not cured; that you doubted whether that was any material cause of disease in the civil community. In the case of gonorrhœa, is it not extremely difficult to know when the patient is completely cured? May he not be infective for a very considerable time?—I do not think so. You will see the amount of invalidings from gonorrhœa is almost inappreciable, and they are all sequelæ which are not in the infective stage; probably gonorrhœal rheumatism, or gonorrhœal arthritis, or gonorrhœal neuritis.

594. With regard to the question of not being responsible for the patients after they are invalided from the service, you are aware, of course, that the army have made themselves responsible for tuberculous cases on being invalided from the army?—No, I have to learn that yet.

595. I believe that is the fact—that they make themselves partially responsible. They are at the present time making some arrangements in their own hospitals for the treatment of a very considerable number of ex-soldiers with tuberculosis?—That is quite a different thing to making themselves responsible for all their treatment. It would be quite impossible. We should have our hospitals entirely filled with the number of cases. In the same way, our method of treating tubercular cases is that we recognise the fact that the Insurance Act has undertaken the care of the tubercular portion of the community. Of course, this is out of the way, but I may tell you in the navy directly a man is found to have tubercle bacilli in his sputum he is invalided. An officer or man is not allowed to stay when one tubercle bacillus is found. We find the danger of infection is great, and directly we communicate with the Insurance Commissioners to get him the requisite treatment when he is invalided. If you can do it without infringing on the space of the active service, you keep him in hospital under the Insurance Commissioners take charge of him.

596. That is what is done in the army to a limited extent; you continue the treatment?—We do that exactly until the Insurance Commissioners can take charge; but, of course, that does not mean you are in any way undertaking his treatment.

597. Do you take the same measure of responsibility with regard to syphilis?—No, we do not.

598. Would it be practicable for you to do so?—No. You see, the civil authorities have undertaken the care of tuberculosis, and, therefore, we communicate with them. But the civil authorities have not undertaken the care of venereal diseases, and we have no authority we can communicate with, or have any right to communicate with.

599. So that in actual fact, as far as the sailor is concerned who is suffering from incurable venereal disease, he is very much worse off than if he was suffering from tuberculosis?—Much. But if we informed anyone directly we discharged a man for syphilis, that so-and-so was suffering from syphilis we would lay ourselves open to an action for libel.

600. That brings me to the point of the notification of venereal diseases. You expressed your willingness earlier to notify cases to the sanitary authorities in the event of the disease being made notifiable?—Absolutely; we are only too delighted. It can be done with the greatest ease.

601. A question was asked you as to the supposed excessive virulence of primary sores which looked more like soft chancre than hard chancre?—Yes.

602. Is not that also open to the interpretation that the after-effects are more severe, not because of any special virulence in those cases, but rather because those cases are not thought to be severe, and, therefore, remain untreated for a long time?—That may be a factor, certainly.

603. (*Sir John Collie.*) I should like to ask one more question. Perhaps you are not aware that it is possible for the Insurance Commissioners to take venereal disease as a sanatorium benefit. Under those circumstances, I take it, it would be possible in the

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same way to link up these discharged sailors in sanatorium benefit for venereal disease; that is, sanatorium benefit in the large sense, not tuberculosis, but sanatorium treatment. I take it that is so?—That is a civil

question; it is not a naval question at all. I am afraid I cannot answer that.

(Chairman.) The Commission are very much obliged to you.

The witness withdrew.

The Commission adjourned to Thursday, 13th November, at 2.30 p.m.

THIRD DAY.

Thursday, 13th November 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIEB, M.D.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Dr. R. W. JOHNSTONE called and examined.

604. (Chairman.) You are medical inspector to the Local Government Board?—Yes, I am.

605. How long have you held that office?—I think since 1899, 14 years.

606. What institutions under the Local Government Board do you inspect?—In connection with this inquiry?

607. No; generally in the course of your routine duties?—Hospitals, and, for certain purposes, workhouses; generally infectious diseases hospitals in the way of institutions.

608. Do you make regular inspections of those institutions, or do you go down when you are called upon to make a special inspection?—When called upon.

609. Not regular?—Except with regard to routine inspection of vaccination, one goes into workhouses always to see they are doing the work; but as a matter of fact, the workhouses are really under a different medical department.

610. In April 1912 you were directed to report on the control of venereal diseases with special reference to the adequacy and general character of the arrangements for institutional treatment of those diseases not available in England and Wales?—Yes.

611. Have you previously given any special attention to the subject of the prevalence and treatment of those diseases?—Not officially.

612. But privately you have taken special interest in them?—Yes.

613. Is this the first inquiry made by the Local Government Board into the prevalence and state of these diseases in the country?—Yes, as far as I know.

614. Can you tell us what institutions which are under the control of the Local Government Board are concerned with the treatment of these diseases?—At the present moment there is the workhouse and the workhouse infirmary, practically the same thing; sometimes in separate buildings and sometimes in one building.

615. And no other institutions?—There is no other at present under our control.

616. Your report says that: "For reasons not far to seek, organised effort to diminish the prevalence of venereal diseases had not hitherto come within the purview of the public authorities concerned with the prevention and treatment of disease." What are those reasons?—I attribute it mainly to the attitude of mind of the public in general, reflecting itself through the political control of all Government offices, that the question has been simply left in abeyance. There has been nothing done in this country since the time of the Contagious Diseases Act, and I imagine it is a reflection of the general popular attitude of letting things go, and hiding one's head and taking no notice.

617. Derived from fear of popular resentment of any attempt to deal with the diseases as things specifically apart?—That is so in a way; but I imagine there is a feeling about these diseases that is quite different from the feeling there is about any other disease. They are regarded as a disgrace to any man or woman who gets attacked by them, and they are regarded by a very large section of people as a proper and just retribution for the sins by which they are acquired. There seems to be a conspiracy of silence in this country, a pretence that we have not got any venereal disease here, this attitude has been generally commented upon by the representatives of foreign countries with whom I have been in communication. Our whole attitude about the question has been to hide our heads and take no notice.

618. Then we may take it that since the repeal of the Contagious Diseases Act nothing has been done in any way to ascertain the prevalence or mitigate the effects of venereal disease?—Not by Government. There is, of course, one thing which might come in, that is the notification of ophthalmia neonatorum, a purulent inflammation of children's eyes.

619. That is a notifiable disease?—It is a notifiable disease.

(Chairman.) When was it made notifiable?

(Sir Almeric FitzRoy.) It was after the Report of the Midwives Committee.

(Witness.) I have the date amongst my papers.

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[Continued.]

620. (*Chairman.*) It does not matter. That was notified as a disease consequent upon, or possibly derived from, venereal disease?—Yes, without any doubt, 60 to 80 per cent. of it is.

621. And that is now notifiable?—That is now notifiable.

622. So that the figures on that, of recent years at all events, would be fairly trustworthy?—Yes. They only run to about a year or so at present.

623. You confine your report entirely to syphilis and gonorrhœa?—Yes.

624. And you exclude venereal ulcer from your consideration, because you say it is easily recognised and usually easily cured?—Yes.

625. But you also say this form is common, and I suppose you think with us that its prevalence ought to be investigated as far as possible?—Yes. I merely look on it in this way, that from the public health point of view the effect of the venereal ulcer is on the individual more than on the public, because it has not as far-reaching consequences as both the other diseases have. It is not a matter of a lifetime; it is a thing that can be cured quickly.

626. Your investigations took you through the Registrar-General's figures, and I gather you think they give us no reliable information of the deaths due to syphilis?—Yes.

627. You go on to say syphilis is rarely certified to be the cause of death?—You see with us certification of death is by public certificate; it is not confidential. It is generally handed to the family, or a copy of it. Medical men do not care to state that their patients died of venereal disease. You cannot expect them to publish it in the present state of public opinion as to these diseases. It may have been perfectly innocently acquired; it is quite possible. Still, if a doctor started giving certificates of that kind he would be liable to lose all his patients to begin with, and his friends as well, possibly, as things are at present.

628. You quote the Registrar-General's figures of death per million for the years 1875 to 1910?—Yes.

629. And those figures show a steady slow decrease in the death-rate?—Yes.

630. Then you give corresponding figures for seven other diseases known to originate in syphilis, and you argue from that that there ought to be a fall in the death-rate from those diseases if syphilis were really becoming less prevalent?—Yes.

631. And you lay stress upon the fact that those diseases are not diminishing, but in certain cases increasing?—Yes.

632. I notice among your figures that other diseases of blood-vessels which became scheduled in 1901 show a very large increase?—Yes.

633. Do you consider that a proof of the presence of syphilis which would not otherwise be brought out?—Only a possibility there, because there are other factors which I mentioned, for instance, the increase in the duration of life, which has occurred, I suppose, through many different causes, such as improved sanitation, and so on, which would render it probable that more deaths would occur from diseases of blood-vessels, because there are more old people. But, on the other hand, there are a great number of diseases of the blood-vessels which are caused by syphilis, and you would certainly expect to see some downward tendency in the number of deaths registered from them if it were true that the syphilis death-rate is dropping in the country to the extent that the Registrar-General's figures appear to show. My own impression is one gathered by talking to men all over the country who are concerned in the treatment of venereal diseases and to men and women who are concerned in the rescue of women. From what I heard in the provinces and in London, I was led to the conclusion that syphilis in the memory of persons, say of 20 years' experience, does not appear to be showing any diminution in quantity. It may be said on the other hand that a medical man gets more cases at the end of his practice when he is known for that sort of work than he does at the beginning.

634. I see that aneurysm remains stationary almost. If syphilis were decreasing you would expect aneurysm

to fall?—Yes. The main causes of death are the thoracic aneurysms; and those are practically altogether due to syphilis.

635. Then another disease is endo-carditis, not infective. That has been classified since 1891 and shows a marked increase in subsequent years. Do you think that syphilis accounts for that increase?—In part. But what one would expect the death-rate to do would be to drop if syphilis were dropping. Those are my chief reasons for distrusting the figures of the Registrar-General. It may be that men are even less likely to put the actual disease, syphilis, into their certificates now, in regard to a large section of the population who formerly would not have had the remotest idea of what the word meant.

636. I think you say that all the general practitioners and specialists whom you have consulted think the primary and secondary stages of syphilis are milder now than formerly?—In a large number of cases I was told that.

637. Would not that mildness be inconsistent with an increased number of derived diseases?—No.

638. In view of the inaccuracy of the statistics, do you give special attention to the frequency of all diseases of syphilitic origin?—Yes, I do.

639. And would these other diseases, if they were properly diagnosed, be unhesitatingly certified as causes of death?—The cause of death might be certified by the same name as now; but the predisposing cause should always be put in as syphilis to have accurate statistics. Of course, that is a matter which really concerns itself with confidential registration. That is to say, when a death is registered, it is the property of the Registrar-General, and not of the public. I do not think we shall ever get proper statistics until we have that.

640. Then we may accept the mortality ratios in these diseases as fairly accurate, and, therefore, it is very important for us to obtain an idea of the extent to which such increasing diseases as those classed as diseases of the blood-vessels are syphilitic in origin?—Yes, I should think so.

641. But I see you give a caution to us as regards the apparent increase, because you think increased mortality from heart disease and diseases of the blood-vessels may be due in part to better diagnosis, and also to cases transferred from such general causes as old age?—Yes.

642. Can you suggest any means for correcting what may be a wrong impression derived from those grounds?—Of course, you could always examine the age periods and compare the age periods of current rates with those of older figures, as far as that is possible. But most of these diseases were not separated from other diseases before 1901. Before 1901 they were mixed up with others, so that it gives us a very short series of figures to examine.

643. The figures that you quote from the Army returns show a very marked diminution of rejections per thousand, and also of admissions to hospital; and you say these figures may be regarded as a strong argument that the prevalence of syphilis is diminishing. But I think you are inclined to qualify that argument?—Yes, I am inclined to qualify it.

644. Do you know if there is any considerable variation in the ages of recruits examined between 1870 and 1911?—No. All I know is that they are supposed to be between 18 and 25 years of age; but I am informed by the recruiting officers whom I have seen, that if the boy looks 18 years of age, they take him as 18.

645. So that if the boys were much younger in the later years and were taken, you would expect to find a diminution of the cases?—Distinctly.

646. And you think that the improved treatment may add to the diminution of re-admissions?—In a way, and changes of treatment too. I mean such as occurred, for example, when Colonel Lambkin introduced his intra-muscular method of administering mercury. Formerly a man was taken into the hospital, and he was an admission. Now he is not taken into hospital at all. He has his injection, and returns to his work. The treatment is more efficacious. That

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makes a great difference to the figures in two ways; fewer admissions and fewer re-admissions. The better the treatment, the fewer the re-admissions, of course.

647. So that we cannot take that as being entirely an indication?—No, not entirely. Then, again, there is the question which arose when the soft sore was first distinguished officially from the syphilitic sore, that is to say, in 1904, I think, in the army. Formerly they were all put down as syphilis.

648. The removal of soft chancre from the syphilis returns would certainly cause a decrease in the figures?—Undoubtedly. There are many other factors that I think are working in favour of reducing syphilis in the army. The men are better taught on the subject. I should think that probably a man in the army knows a great deal more about these diseases and how to guard against them than any ordinary civilian, because his officers take the trouble to teach him; and it is being done more and more every day. Then they are becoming more sober. Of course, that is a factor.

649. On the whole, you consider the decline of the disease in recruits and men serving may be significant?—Yes.

650. By that, you mean it is significant of some decline in the general prevalence?—Yes, but it cannot be taken as an exact reflection of what is going on amongst the population.

651. Amongst the civil population?—Yes.

652. I see you give some figures resulting from notification in Copenhagen, which were taken in 1911?—Yes.

653. Did you come across any figures for Copenhagen prior to the compulsory notification?—No. I made inquiries at Copenhagen, and I got these figures from their Doctors' Annual of 1911, and I was very much struck by the size of them. I wrote to Dr. Madsen, the director of the Government Institute of sero-therapy there, and he very kindly sent me a letter criticising them, and a pamphlet by a man who had undertaken the criticism at their request, because they were surprised by the number. He says about one half that number is somewhere nearer the truth, owing to the fact that they did not have any names notified; and the same case came back, and was notified again and again. I have the papers here. They are very interesting, as showing the effect of notification without names or addresses.

654. But does the re-notification mean that the same case is notified by the same doctor?—Not necessarily the same doctor. He may go to another doctor, or change his locality. You see at Copenhagen there is a very large marine population coming from the ships, and that raises the figures. These people wander about.

655. Was the general effect of notification in Copenhagen to bring out a much greater prevalence of the disease than had previously been expected?—No; because they expected an enormous increase. I think it was about 1896 that they started, and they expected something extraordinary would be found out when they had notification. But it did not happen so when allowance was made for the re-notifications.

656. Do you think we shall be able to obtain any special information of value from Copenhagen which would assist us in our investigations?—It is quite possible. I was talking to Dr. Madsen about it a week or two ago. I understand they either have, or are going to introduce notification with names. But I am told the objection to full notification which exists here does not exist in any of the Scandinavian countries, certainly not in Norway or in Denmark. They have not the number of quacks, chemists, herbalists, and advertising people that we have; and there is not therefore the same danger of full notification leading to concealment of the diseases.

657. I see you have come to the conclusion that any statistical comparison of the different parts of the country would be impracticable in this country?—Yes.

658. But would not the Registrar-General be able to give us returns for separate county boroughs, say?—I am sure he would as regards deaths from syphilis, for instance.

659. Would you not think if deaths were more prevalent in one borough than another, that the general prevalence was probably higher?—You would think so. Of course it would depend largely on other things.

660. Do you not think the naval and military figures as regards the ports sailors frequent, and the garrison towns, might give us some idea of the relative prevalence amongst the civil population?—I practically did not touch the naval figures at all, because what I was looking for was some indication of the prevalence in this country. As regards the naval returns. I was always confronted by the question, "Where was the disease acquired?" It might have been abroad. So that I did not spend much time on the annual reports of the Naval Medical Department. As regards soldiers, if one could compare one regiment with another, in an entirely different locality. I suppose one could get some information as to the comparative prevalence of venereal disease amongst the civil populations of the two localities. But of course, properly looked after, the men would never have the same rate of venereal disease that you would get amongst persons of the same age and sex in the civil population, in my opinion, because they know more, and they are better looked after.

661. Your inquiries, I think, showed you that most of the general hospitals were unable to give you accurate figures as regards their out-patients department?—No; they could give me nothing that I could use. I got figures from a good many of them, but they were all so imperfect that even those I have given, over which a great deal of trouble was taken, were not complete. They do not include the eye or ear departments, and they are both departments which are likely to have a large amount of disease which is the consequence of venereal disease.

662. Do you think we should get accurate figures if we asked for special returns over a period of six months?—It would be perfectly easy. I should prefer it for a year. There would be no difficulty. The hospitals would be glad to do it probably if they were given notice and asked to start at a given date, and end at another given date. You would then certainly get something worth having.

663. As the application of modern tests becomes more general, do you expect that a much higher prevalence of recognition than we now have would be disclosed?—It has happened that way wherever it has been done on an experimental scale. The Australian experiments that Barrett related at the Royal Society of Medicine point to that—both the post-mortem investigation and the Wassermann one.

664. It follows from that, does it not, that the application of tests on a large scale throughout the country is very desirable?—I should say it is one of the few ways in which one could really get at the truth. It has never been done, as far as I know, to any general collection of people; it has always been done to a particular class. The patients coming to a particular clinique, or else the patients who die in a particular hospital. For instance, at the hospital at Melbourne they made 200 post-mortem examinations of people who died from all sorts of causes, not necessarily venereal causes, and I think one-third of them showed evident signs, not of venereal disease, but of syphilis, at the post-mortem. In the same way Barrett, in his experiments in his own clinique, took all those who presented themselves, the bulk of whom showed no clinical signs of syphilis, and obtained specimens of their blood. The Wassermann tests of these specimens showed that 13·5 per cent. were syphilitic. But these cases were almost all cases of latent syphilis, and in latent syphilis the Wassermann test generally does not give positive results in more than 50 per cent. of the cases tested, so that it might be concluded that about 27 per cent. of the patients presenting themselves at Barrett's clinique were syphilitic.

665. (Dr. Newsholme.) It would be convenient for me to ask a question on that point as bearing on the 27 per cent. of people not showing clinical signs. Are you quite sure it did not include a certain proportion

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who did show signs?—Only a very small proportion. He says so.

666. You have his report?—Yes, I have it here.

667. (*Chairman.*) I see you refer to a report published by your Board to the effect that quackery is very much on the increase?—I desire to make a correction. It was not issued by the Local Government Board; it is my mistake. It was issued by the Privy Council.

(*Sir Almeric FitzRoy.*) Yes; it was after inquiries instituted by the Privy Council.

668. (*Chairman.*) You do not know whether medical officers of health take notice generally of the increase of that?—I am afraid they do not. It has been divorced entirely from public health up to the present.

669. Would they be in a position to give information as to the prevalence of quackery?—I beg your pardon; I thought you meant venereal disease.

670. No, quackery?—Yes. Certainly they know what is going on in their districts.

671. You think there is reason to believe that quackery is an increasing evil?—I think so, every day.

672. You have referred to some legislation in Australia directed against quackery. Can you tell us what that legislation was?—That was in Melbourne, when they established compulsory notification for a year for experimental purposes.

673. We can get information on that point?—Yes, you can get information from Mr. Ham, who is here. They made a law imposing severe penalties on any person other than a registered medical practitioner who dealt with these diseases at all.

674. Are there any penal results?—Yes, a heavy fine and, I believe, imprisonment. I am not sure; I would rather you asked Mr. Ham.

675. I understand from your report you think the hospital accommodation at present provided for the treatment of venereal disease is much too limited?—Absolutely. At the time of my inquiry the only beds specially provided in London for venereal diseases in its early stages outside the Poor Law institutions were those in the London Lock Hospital. At the present moment the male branch of the hospital is being rebuilt, and in consequence only one or two emergency beds are at present available for males.

676. Do you know why it is that advanced cases of syphilis and complications of gonorrhœa are freely admitted, as you say, but early cases are not treated?—Because people have got the idea that the early cases are so much more infectious. That is true, and it was on the ground of infectivity that objection was generally raised when the matter was discussed. I have had many discussions with hospital secretaries and surgeons and physicians. Occasionally they object very much. Some say that their staff are not properly prepared for it; they would get infected. Others put it on moral grounds. I had one letter from a surgeon of a London hospital, who is a very well known man, after my report came out, in which he said he had given a few of his beds for the Salvarsan treatment, and that he had had a great deal of unpleasantness amongst his colleagues about it. So that even the medical side seems to object to bringing in the early infective cases, the ones we can cure and the ones we want to get in.

677. I suppose your general deduction from all these inquiries is that far more facilities for treatment, and especially early treatment, are most wanted?—Yes, I think from the public health point of view as regards the new development of treatment, the important thing is not whether it is going to cure people in the end, because there is still mercury, but that the infective stage can be terminated much more quickly. It makes early treatment for preventive purposes a practicable thing.

678. You find a great many deficiencies in your Poor Law infirmaries and workhouses. To what extent are those institutions controlled by the Local Government Board?—We have a special department. It is a matter of history really. My department, the medical department, was originally part of the Privy Council, and it was combined with the old Poor Law Board to make the Local Government Board. The Poor Law

portion still retained its own medical staff. My department is public health; and the Poor Law part of public health has a separate administration from the medical point of view, so that my department does not control the Poor Law institutions except as regards vaccination.

679. If you find very insanitary conditions prevailing after one of those inspections, the Board has no power to say it shall come to an end?—No, we represent it to the other medical department, and they have to take it up.

680. But has the Board power?—Yes, of course.

681. If anything exceedingly insanitary is discovered, the Board can drop down and say it has to be remedied?—They can.

682. As regards the question of innocent infection, is it possible to get any trustworthy figures upon that point?—I think they could be got.

683. Can you suggest how?—I think you could get a great many figures from London, and possibly other towns in the provinces, by making inquiries from the medical men who treat venereal disease as a speciality, because there is no concealment about the patient. There is no reason for any concealment. I think you could get a good many figures in that way.

684. Would a patient's statement on that point?—Not the patient—his doctor. You would never go round to all the people. There are a great many.

685. But the doctor would not know how the infection had been conveyed; he would have to depend on the patient?—That would tell itself as a rule. I am speaking of extra-genital infections. Innocently acquired infections arising *à coitu* would be very difficult to obtain figures about in this country.

686. Would the effect of the Old Age Pensions be to free accommodation on a considerable scale which might be used for the treatment of venereal diseases?—Not considerable accommodation, I think. I am not at all enthusiastic about the workhouse accommodation. I do not think it is good enough. I do not think it is suitable in any way.

687. Not capable of being made suitable?—Not without a great deal of difficulty. The infirmaries are, very often, perfectly modern; and I think that for a disease as contagious as this one is—especially as you want to undertake treatment of the contagious stages of it—you should have a modern hospital ward, a place that is absolutely capable of being washed out. The corners should be rounded; the floors should be hard and smooth of all dust, and other excrescences where dust can lodge should be avoided, just as is done in modern fever hospitals.

688. Will the effect of the Insurance Act be to lighten the work of the out-patients in the infirmary?—That I could not say.

689. I see you are strongly in favour of separate wards and not of separate hospitals for the treatment of these diseases?—Very much.

690. What is your deliberate opinion on the question of compulsory detention?—Of course it is perfectly logical, I will not deny that for a moment; but I think it would have a deterrent effect. I know that an attempt which was made at compulsory detention of paupers had that effect.

691. I see in your report you point to the conditions under which some of these people are treated as being peculiarly unpleasant. Would voluntary detention be more effective if the amenities of these places were improved?—I think it would be much more easy to keep patients when necessary, than is the case with the accommodation offered at present in some of our workhouses. Venereal patients are generally given the very worst ward in the house, and that is sometimes very bad in the old workhouses.

692. I am sure you are aware that a majority of the Poor Law Commission reported thus: "Whenever 'sufficient proof is produced that an individual is in 'such a condition as to be a danger to the community 'amongst whom he or she may be living, an order for 'detention or continuous treatment should be obtainable.'" Was that recommendation considered in your department?—It would not come to us; but it was considered in the case of Poor Law institutions

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and it was advised on by the legal adviser to the Board, and the conclusion was that it was not possible to do it without legislation. I think the legal adviser said it was impossible to do it under our present powers. He differentiated it in some way from other infectious diseases. It was a legal matter entirely.

693. Fresh legislation powers would be required?—Yes.

694. Do you think all the workhouses should be provided with adequate means of testing these diseases?—It is difficult to say that. It would not be necessary, because you could always send the specimens to some neighbouring place which was well provided. You see, it would mean the provision of a bacteriologist, and a skilled one, because the Wassermann test, for instance, requires great experience and accuracy.

695. I take it an increase of local facilities for bacteriological examination is wanted?—Yes, very much wanted.

696. For all localities?—County Council laboratories already exist, and probably most of them are quite able to do bacteriological work. It is desirable in regard to the Wassermann test is to concentrate, because it is cheaper when you do plenty of them than if you do them individually. It practically costs as much to do one as to do 40.

697. I see you refer to the Noguchi test which was introduced this year, and, of course, we shall have to take evidence upon that test. But since you have made your report, have you received any further information as to the validity of that test?—I have heard his own account of it. He gave us an account at the Royal Society of Medicine, when he gave a lecture the other day. He is very confident that it is an excellent thing in the later stages; but it is not at all so certain in the earlier.

698. The earlier stages are probably the more important?—The earlier stages from the preventive point of view are certainly more important.

699. If it proves satisfactory and safe, it would be an easy test comparatively, would it not?—Yes, it would be a much easier test to apply.

700. I see you say it will be necessary to provide for free tests in aid of diagnosis. I suppose you mean by that, that the Government should provide free tests?—Certainly. I mean they should provide it free to the patient or free to the doctor. There should be no hesitation about a doctor applying the Wassermann test to a patient because a patient cannot pay for it. The doctor cannot be expected to pay for it himself. Provision should everywhere be made for free Wassermann tests.

701. Would that mean a very large extension in the present laboratory facilities?—I do not think so.

702. Your main point, I see, is that prompt recognition and early treatment in the first stages is of primary importance in dealing with these diseases?—Yes.

703. And you think at the present moment compulsory detention or compulsory notification should not be set up?—I do.

704. Then you say full notification could probably be introduced later on. Do you mean in that case notification by name may be possible a few years hence?—Yes, I do: name and address. I look at it in this way, that if by a system of provision of facilities for treatment and at the same time some kind of educational propaganda we could teach people that the one thing they had to do was to go straight for treatment, I think we would make so much impression on the disease generally that we would only have the sweepings left to deal with. It would not matter then to the same extent. Besides, the mere education of the public on the matter would be sufficient to make them take a different view of it, and to see that instead of proposing to punish people for their sins by allowing the disease in the country to increase, we propose to offer them the best modern treatment, and thus prevent the disease from being spread. Later on I look forward to a time when we should have really got hold of the disease, but at present it is perfectly hopeless to think of anything in the way of compulsory notification

or detention. Males and females both have to be dealt with.

705. Can you suggest any way of preventing duplication without introducing names?—I cannot suggest any way at the moment. Notification without names would only have a statistical value. No measures could be taken on it. You get the number, but you do not know where the patient lives, or, if you do know where he lives, you are not supposed to visit. You simply know how many cases there are in your district roughly. What can you do with it? Notification of tuberculosis would be no good if we did not take measures to follow it up, and it is the same thing with ophthalmia neonatorum.

706. I see you speak of the importance of the question of venereal diseases to the local Insurance Committees. Would you tell us how they would be affected?—You see, a man is invalided, and he claims his sick pay. He gets free treatment; but, as far as I understand, he does not get his sick pay.

707. Does he not?—I think not; that is why I put the remark a little bit later in my report.

(*Dr. Newsholme.*) He gets his medical attendance, but not 10s. or 15s. a week.

708. (*Chairman.*) He gets free treatment?—Yes; whereas, the man next door, who has got drunk and nearly broken his neck, gets paid everything.

709. If the prevalence could be reduced it would be a great financial advantage to the Insurance Committees?—Yes.

710. I see you hold out hopes that the Poor Law institutions can do much more than they do now to check the prevalence of the disease?—Yes, undoubtedly. There is an example which I mention, where one man under unfavourable circumstances has been most successful with Salvarsan administration, and has emptied out a ward which was always formerly full. You will probably see him later, I should think. It makes a difference. A patient comes in for Salvarsan treatment and, instead of being kept for a lengthy treatment, as was formerly the case, or taking his discharge while still in an acutely infectious condition, he receives his injection, and very soon the highly infective manifestations heal up. The Spirochæta disappears from the lesions in a very short space of time. Whether that means they are no longer infectious I do not know; but they certainly heal up very much earlier than under the old treatment, the patient can then be turned off to his work, and can come back for his mercurial treatment, or any further treatment from time to time, week by week or fortnight by fortnight, as may be arranged. In that way you would deprive an enormous number of men and women of the power of infecting other people. My hopes of cutting short the disease in this country are grounded upon getting at the source. One woman or one man may be the starting point of thousands of cases. If you can make a syphilitic person non-infectious in the early stage, he is much less likely to infect other people at a later stage, and if he continues to come back to you you can absolutely prevent him altogether from infecting other people.

711. I suppose you mean that these Poor Law institutions could be of much greater help than they now are if further powers were given to the Board by legislation?—I do not know about that. My idea was if they were better equipped both as regards staff, laboratory, and so on. Some of the buildings are good enough for anything. The workhouse infirmaries are often excellent modern buildings with most suitable wards.

712. Is that within the power of the Board at present?—It is very difficult for me to say, because I have no connection at all with the administration of workhouses. You will get that from Sir Arthur Downes.

713. Then, speaking broadly, your general deduction from these inquiries that you have carried out is that a franker attitude towards the subject is necessary?—Yes.

714. And that we must drive home the importance of the question from the point of view of public health and make that importance as widely known as possible?—Just so.

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715. We are about to circularise all the large general hospitals and all the special hospitals. Could you suggest any other sources from which we could get any useful statistical information?—In this country?

716. Yes?—Of course, there are the figures available as far as they go at present for ophthalmia neonatorum. We could supply those.

717. And the eye and ear hospitals, of course?—Yes, and of course the children's hospitals to find out about the congenital cases.

718. The children's hospitals will be particularly valuable from the congenital point of view?—Yes. As a matter of fact a return was got out privately many years ago of all the congenital cases that occurred within a year in a certain number of hospitals. I have forgotten the name of the man now, but it was in one of Dr. Wilson's publications that I saw it. I tried to get in touch with him to see how he got his figures, what his queries were, but I could not. His papers could not be found, so that I did not pursue the thing myself. But if it had been possible I should have done the same thing over again so as compare them.

719. (*Sir David Brynmor Jones.*) I have read your report and listened to your evidence with very great interest; but I am afraid I am only in a position to ask you one or two rather general questions. I find, for instance, on page 4, after giving the Registrar-General's annual report, you say: "For reasons already given it is doubtful whether these figures give any clear indication of the actual number of deaths from syphilis in this country." I hope you will not think I am unduly sceptical if I ask you what you mean by a death from syphilis?—A death from syphilis is really a death of which syphilis is the main cause—the exciting and main cause.

720. I do not want to quarrel with that answer as one justifying the phrase which you use; but it suggests to me that the whole of the Registrar-General's annual report as to the cause of death may give rise to certainly reasonable scientific doubts. What is the cause of death?—I am afraid that is a question I cannot answer.

721. You see what I mean. Does not the validity of the whole of the statistics that are presented to us depend upon the theory that a man is to go on living for ever unless a doctor can say, "the cause of his death was such-and-such a disease." I do not want to go into metaphysical questions, but it is my duty here to examine the propositions so far as I can?—The point of view is simply this, that when a man dies one wants to know what killed him as far as one possibly can, and from the practical point of view the doctor who is attending him is the person who has the best chance of knowing, and he gives his opinion in the form of a certificate. But if the fact of giving that certificate will render the man's whole family miserable, he does not give it in that form, but he gives it in another form. That is my only point.

722. If a man should kill another man with a revolver, to use ordinary phrases, the cause of death is the revolver wound?—I think that would be called murder.

723. You used the word "killed." The reason I am asking is because a great deal, it may be, will turn in this inquiry upon the theory of disease. I began my question by saying "death from syphilis," but when I listened to what you have been good enough to say to-day, and I have listened to another witness also, it seems that syphilis—that is a general term, apparently—involves a great many things besides the ordinary symptoms. It may bring on, in the case of an individual man, something that you call locomotor ataxy for instance. Is that so?—Syphilis is a specific disease due to a specific cause well known now.

724. Then, you see, the word "cause" has to be brought in in more than one connection in the series of answers you have given to me. A man dies from locomotor ataxy, and the locomotor ataxy is due to syphilis. Do you call that a death from syphilis or a death from locomotor ataxy?—In signing the death

certificate you will put locomotor ataxy, and you will put as the antecedent cause syphilis.

725. I am afraid I am not a doctor, and, only being a lawyer, I get a bit puzzled?—Every death certificate is put in a form, and you are asked to state the absolute cause of death as near as you can. For instance, it may have been the bursting of a blood-vessel due to an aneurysm. You are also asked to state the antecedent cause so far as you know it.

726. Then let me put my question in a more concrete form. When a doctor like yourself says that death is caused by syphilis, may it mean that it was caused by aneurysm or by locomotor ataxy?—Certainly.

727. Then if you say it is caused by locomotor ataxy, does it necessarily mean it was caused by syphilis?—Practically now as far as I can see, yes—almost.

728. Please do not think I am in the least degree attacking medical science or attacking your skill. I am only on the use of words?—Locomotor ataxy only describes a certain series of symptoms which occur before a man dies. Nobody knew why it came on until recent years. It is now found that practically all those who die of that disease have previously had syphilis; but it does not at all follow that because you previously have had syphilis you are going to have locomotor ataxy.

729. Then really it comes to this; that the proximate cause is the one that has to be treated as the cause of death, and the proximate cause is simply a general word covering certain concrete individual symptoms usually summed up under that heading?—When you speak of a specific disease, you generally speak of a disease where you know the particular microbe that caused it, and you know a person inoculated with that microbe gets that disease.

730. You are bringing in now quite new words in using the word "microbe" that, probably 500 years ago, would not have been understood even by members of your profession?—That is quite possible; but I am not talking 500 years ago.

731. I am not in any hostility to anything you have said. As I say, I am only trying to understand the terms that are used in this report of yours?—I do not think I have used that term. As a matter of fact in this connection I used it because it is a less technical term than *spirochæta pallida*.

732. Pursuing that kind of inquiry I find you use the word "infective" on page 13. You say, "Syphilis is infective in the primary and secondary stages"?—Perhaps I ought to have said infectious.

733. What does "infective" mean; it is an adjective?—I use it the same as infectious—capable of infecting a person—contagious.

734. Capable of being conveyed from one individual to another?—Yes.

735. Is there any distinction between contagious and infectious?—Of course, there is the etymological one. One word refers more to diseases in which infection is usually conveyed by touching a person, and the other does not to the same extent; but in this case, as far as is known, you must either convey it by touch or by means of some intermediate object.

736. Then am I to understand that syphilis may be contracted not simply by infection in the sense of contact; but it may come from one individual to another through the unknown atoms, or whatever you like to call them, of the air or the ether?—No, through contact with some other. You might get it through implements or pipes. It can be conveyed in a variety of ways by different implements, and such cases are on record. It is no use giving all the causes or ways—any contact or intermediate object which allows the specific—what word may I use, please? May I say microbe, or anything that is capable of conveying it and still keeping it alive.

737. Then your answer suggests to me, may a syphilis microbe be hopping about?—Yes, they are motile in some forms. The *spirochæta* is motile. He can hop about—not about a room, but in the serum. You can see them moving.

738. Now we are getting into a finer theory. What I want to know is what you mean by saying that syphilis is infective. I can understand that it is con-

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tagious?—That one person having syphilis can infect another person or is liable to; that is what I meant.

739. That is only another form of words. Do you mean that one person can give another person syphilis without contact?—Certainly. If the patient has soiled or infected an article which the other person puts to a susceptible part of his person—his mouth or his eye—then infection can take place without contact; but only in that way, as far as I know.

740. (*Sir Almeric FitzRoy.*) A sort of secondary contact?—Just so.

741. (*Sir David Brynmor Jones.*) Sir Almeric says secondary contact. That only makes the matter more complicated from the point of view of mere words. What is a primary and a secondary contact?—You will have to ask him that.

(*Sir David Brynmor Jones.*) Either you touch or you do not touch.

(*Sir Almeric FitzRoy.*) In one case the touch is direct and in the other it is indirect. That is it, is it not?

(*Witness.*) Perfectly. It is suggested to me "intermediary."

742. (*Sir David Brynmor Jones.*) If it comes from contact, whether direct or indirect, it is contact or contagion all along. I am not wishing to have any mere logomachy. Let us establish some nomenclature, some terminology?—Whether it is contact or not, one man infects another, he is infective.

743. Then I take it you think that syphilis without personal contact?—Only in the way I have mentioned.

744. You have no evidence that the bacillus or microbe, or whatever it may be, of syphilis is carried through the air. it may be?—None whatever.

745. You refer to the desirability (and, of course, here everybody will agree) of prompt recognition and early treatment?—Yes.

746. You mean in the case of any particular unfortunate man or woman who happens to get syphilis or gonorrhoea?—Yes.

747. The problem of the treatment of the individual is not necessarily the same as the problem of stamping out the disease in the general interests of the community, is it?—I think it is the beginning and end of it. It is the main thing, I think. I am talking from a practical point of view.

748. You mean, if anybody gets syphilis the very best thing he can do, not only in his own interest, but in the general interest, is at once to seek a medical man and let it be recognised and treated immediately?—Yes.

749. If that were the intelligent practice of everybody, that would go a good way to minimising the evil, would it not?—I think it would stamp out the disease, if that could be obtained.

750. (*Sir Kenelm E. Digby.*) You spoke of confidential registration. Would you mind developing that a little? Who would be the person who would carry out the confidential registration?—I suppose the doctor in attendance would communicate directly with the Registrar-General.

751. There would be communication from the doctor to the Registrar-General?—That and, of course, the necessary permit for burial.

752. Would that be confined to the particular class of cases we are dealing with?—I think you would find, if you asked the Registrar-General, he would tell you that the accuracy of his figures would probably be benefited by a system of that kind.

753. How would you secure that that should be the general practice where a medical man really attributed the death to syphilis? I will not go into whether it was the proximate or more remote cause; but where a medical man really thought the death was traceable to syphilis, and wanted to communicate that to the Registrar-General, would you suggest that he should be under any obligation to do so?—Yes, I should suggest for every disease. Of course, I am only concerned at present with venereal diseases, but in all cases every doctor who writes a certificate is supposed, to the best of his ability, to say what killed the man.

754. What I want to get at is how you would secure that to be a sufficiently general practice to be really useful. To put it in another way, would it be enforced by the medical profession, or would it be a legal obligation on them to do it?—It would be done under the same law as at the present moment, under which every medical man has to register a death. It goes through the local registrar of births and deaths.

755. But we are now introducing another kind of registration in order to get out of the difficulty. Instead of using the word "syphilis" you communicate confidentially to the Registrar-General that that is the real cause of death?—Yes. When I said it I was not thinking of syphilis alone. I was thinking that confidential registration generally would be better.

756. How can you make it a sufficiently general practice amongst the profession to secure the results?—It would have to come from the Registrar-General, but how he would get it I do not know. I do not know what machinery he would consider it best to employ.

757. It is a most important suggestion. I want to see how in practice it can be carried out. Would you have a rule enacted by some authority, either professional or legal, that where a medical man really attributed a death to syphilis, he should communicate that confidentially to the Registrar-General?—Yes.

758. We must deal with syphilis. Would it be a legal or professional obligation, or merely a moral obligation, is what I want to know?—That is making syphilis different from everything else.

759. It is rather different from everything else?—It is only different by being a different disease, and by the different way it is looked upon.

760. There is a special reason why a medical man shrinks from saying what the real cause is, in his opinion?—Yes.

761. We want him to communicate the real reason, but to do so in a way which will not be as difficult as it is at present. What I asked was, what obligation would he be under to do that if he would not do it willingly?—Of course, it can be done voluntarily; it could be done by being paid for.

762. We want to make it a general practice. We want to get at what the real facts are, and how many deaths are really attributable to it?—I should think it would be merely a matter of paying for the certificate.

(*Sir Kenelm E. Digby.*) Charging another fee.

763. (*Dr. Newsholme.*) Will you forgive me if I ask Dr. Johnstone a question, because I do not think he has understood quite the bearing of Sir Kenelm Digby's question. (*To the witness.*) The question is this: you are aware that at the present time the registration of the cause of death by a practitioner is a legal obligation imposed by Act of Parliament?—Absolutely.

764. Are you proposing that in the event of registration of the cause of death being given confidentially to the local registrar or the Registrar-General that should similarly be a legal obligation?—I have made no proposition.

765. At the present time, the cause of every death is compulsorily entered on a certificate by the practitioner who attended the deceased?—Yes.

766. That is enforced by Act of Parliament?—Yes.

767. If the certificate were sent to the Registrar-General instead of being handed to the relative, you would assume that the same legal obligation would be imposed in that case? I think that was Sir Kenelm Digby's point?—Yes, that was the idea, but I did not make any proposition.

(*Sir David Brynmor Jones.*) That does not carry it any further, because the cause of death is not properly ascertained in any case as far as I can make out from the witness's statement.

768. (*Sir Kenelm E. Digby.*) I was using "cause of death" in the ordinary sense; that is to say, a man has syphilis and locomotor ataxy, and the doctor has to say that really death was caused by syphilis. Now I want to know how to secure that it shall be adopted by the profession as a general rule that they should furnish this information?—I do not think there is the smallest prospect of securing it at present.

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769. No; but you want to secure that it shall be. I was merely asking you how you would secure that?—I do not know. I should think you would have to alter the whole system of registration.

770. At all events we have your view that it is very desirable it should be done if it can be done. I hope to carry it a step further and ask your opinion as to how it could be done?—I am afraid I have not got so far.

771. I think you said that you had not inquired much into the actual state of things in the navy?—No.

772. But is there not both in the army and the navy, speaking for myself mostly as regards the navy, a general order or practice that as a matter of discipline the men shall notify to the doctor when they are infected?—I believe they have to report themselves; and I understand they must report themselves, in the army at all events, to their own surgeon.

773. I have been told of a case where on a destroyer with a crew of about 75 people, an order came down from the Admiralty that this was to be the rule, that it would be a disciplinary offence not to notify; and that when an officer, in the course of his duty, read this out to the men, out of the crew of 75 men 30 went straight off to the doctor. Did you know of any practice of that kind?—No. I did not see much of shipboard. I saw the hospital at Haslar and spent a night or two there and saw their practice; but I did not think their figures would be of any use to us as a gauge of what our own prevalence was.

774. (*Sir Almeric FitzRoy.*) I wanted to ask you whether you have read the paragraph on the prevalence of syphilis in the report of the Physical Deterioration Committee that sat nine years ago?—No.

775. There, the late Sir Alfred Cooper, Sir Victor Horsley, and our colleague who is not here, Dr. Mott, all agreed there was no increased syphilis?—I do not say there is an increase.

776. Then further, Sir John Tweedy, as he now is, was under a very strong impression that there is nothing like the same amount of secondary or tertiary disease, or disease transmitted to the children, and quoted as a proof the diminution of a disease of the eye, called interstitial keratitis, which is essentially a disease of inherited syphilis. You will admit the important character of Sir John Tweedy's evidence?—Yes, of course. What was the date of that?

777. The report was issued in 1904. There is a special section devoted to the subject of syphilis, which, of course, was rather outside the general character of the inquiry?—I should not go beyond saying that I do not think there is a diminution that is in proportion to that shown by the deaths from syphilis in the Registrar-General's reports.

778. Have you any reason to think that alien immigration has anything to say to its introduction into this country?—Yes, I should think so, in ports.

779. I am told that in Germany, for instance, they are only too ready to encourage the emigration of anybody who is infected?—I have heard complaints occasionally in my official work from port medical officers, that in the course of examining passengers and crews with regard to plague they have found cases of venereal disease and found themselves helpless of doing anything.

780. Are the officers under the Immigration Act charged with any particular responsibility in this matter?—No, I think not generally.

781. You mentioned that the treatment of these diseases by unqualified persons is a great evil?—Very.

782. And I understand you would like to see it made a punishable offence?—I should like to see it stopped.

783. How could you stop it except by making it a punishable offence?—Quite so.

784. You are in favour of its being made a punishable offence?—Yes.

785. Are you aware that one class of persons, namely, herbalists, have their pretensions very favourably looked upon by members of Parliament and other persons?—Yes, no doubt.

786. And that might form a serious obstacle to such legislation?—I do not for a moment fail to recognise the difficulty of doing anything of that kind.

787. With reference to the report which was issued by the Privy Council Office, you remember it included a great many examples of advertisements which were intended to catch the eye of women and other persons suffering from what are called "mysterious complaints"?—Yes.

788. And that is one of the most constant modes of their propaganda?—Yes.

789. Do you think the re-examination of the opinions of the medical officers of health, on which that report was based, would bring to light any further facts of interest to this Commission?—I should think it might. Do you mean the original documents?

(*Sir Almeric FitzRoy.*) Yes, the original documents are in the hands of the Local Government Board.

790. (*Dr. Newsholme.*) That has been done inside the Board?—I think you will get a very much better idea, perhaps, if you go through the documents.

791. (*Sir Almeric FitzRoy.*) Yes; a re-examination of them would be useful. I understand from Dr. Newsholme's introduction, that in your view, in which he agrees, the notification of venereal diseases is not at present recommended?—Personally I should be altogether against it at present, because I think we are not ready for it.

792. But referring to the evidence given to the Physical Deterioration Committee on that point, are you aware that Sir Alfred Cooper and Sir Victor Horsley strongly advocated compulsory notification nine years ago?—I am aware they did, and a great many other people do now. There is no question that a great many people are inclined to say straight off "Have notification."

793. Have any circumstances occurred since to cause an alteration of that opinion, do you think?—I cannot say, because my inquiries are not sufficiently old; they are too recent. I tell you simply my impression that I gathered in going through the country with a view of finding out all I could about it, and I was told by everybody that notification would drive most men away from the doctor.

794. It would act obstructively instead of remedially?—Obstructively entirely. I was told by many medical men that at the present moment their venereal patients do not come to them at first; that they almost invariably have a turn at curing themselves or they go to some unskilled person, and there they lose the precious minutes. If they had been taken at once into skilled hands, it is very possible they might never have had any further symptoms of syphilis at all.

795. Are there any other directions in which either the prevention or cure could be assisted by the imposition of penalties?—In a good many countries—for instance, the Scandinavian countries—it is a penal matter knowingly to infect another person. I do not know what the law is here, but I imagine it would be a civil business.

796. There are no penalties here?—Could you not take a civil action and call it cruelty: they do in France, "séances" they call it.

797. Do you think it should be punishable not to have proper advice?—I do not think so in this country.

798. In the course of the discussion that took place at the Royal Society of Medicine last year, it was stated that Germany already prohibited the marriage of persons within 10 years of acquiring syphilis. Do you think that could be done, or that it is expedient to do it?—No; I think it is too long an interval altogether.

799. Owing to the value of modern therapeutic agents?—Yes.

800. They are also about to make a heavy penalty for a syphilitic man or woman knowingly to infect an innocent person?—That, I thought, was a possibility to consider.

801. Would you advocate such legislation in this country?—I see no disadvantage in it, and it might be an advantage. I do not suppose you would be

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able to prove it was knowingly done once in a hundred thousand times.

802. But the negative effect would be larger than the positive?—Yes.

803. You sum up your argument in this way, that the essence of a problem is to get a willing patient at the earliest time under treatment. Does the Insurance Act operate in that direction or the reverse; of course, touching the classes that come under its provisions?—If the wheels of the Insurance Act are incessantly greased, and the thing is going for another year or so, one might be able to say more about that.

804. Sir Robert Morant will be better able to answer that question?—Yes. There has been so much trouble between the doctors and the insurance authorities that the thing has not settled itself down to its normal lines yet.

805. You do not think there is enough evidence forthcoming yet?—No.

806. (*Sir Malcolm Morris.*) You commenced this valuable report in April 1912?—That is when I commenced the work.

807. Up to that time you had not done any particular work on this subject?—No.

808. You commenced it at that time, and from time to time it was interfered with by other official duties obviously?—Yes.

809. It was brought out rather suddenly in August on account of the agitation that had taken place on the subject. If there had been no agitation, would you have gone on with the investigation?—That I cannot say. You see my report was ready some little time before that.

810. Had you completed it?—Not for a week or two. I had to go away just about that time.

811. My only point is this: if you had had more time, and it had not been brought out then, would you have been able to find a larger amount of facts?—No. I had got as far as I thought I could well get under the terms of reference. There is plenty of work waiting to be done in branches of the subject that I have not touched.

812. Supposing there had been no special attention paid to the subject on account of the Congress, when would this report have come out?—I should think it would have come out about the same time.

813. It was not anticipated in the least?—No.

814. So that as a matter of fact you had got all the facts you could get on the subject?—Yes, all that I could get hold of under the terms of my reference.

815. So that the report is as complete as it could be?—As far as my reference went. There are many branches of the whole subject which, of course, I did not touch upon in the report.

816. You came very definitely to the conclusion that there was inadequate treatment in the country for syphilis as a disease?—Absolutely, I thought, especially in the early stages; that is the curious part of it.

817. That in the general hospitals the treatment was inadequate?—In the general hospitals there were no beds specially reserved for venereal diseases in the early stages at the time when I made my inquiry.

818. No beds?—Practically no beds in London. Occasionally a hospital might admit a few infective cases, in order to try a new treatment.

819. Did you also come to the conclusion that the treatment in the out-patients' department was inadequate too?—I did from what I saw of them and the inquiries I made.

820. Having more special reference to modern treatment by Salvarsan?—Yes, and Wassermann.

821. Was that also apropos to mercury?—The treatment by mercury alone was retained to a large extent, and there were very few out-patients' departments held at hours really suitable to the working classes.

822. Did you go into the question of the adequate instruction of doctors in the general hospitals on the subject?—Of the students?

823. Yes.—Only from a side issue, and from the fact that there were no early infective cases available for teaching purposes except in the out-patients' department.

824. Therefore they had very little opportunity of studying the early symptoms of the disease, and appreciating the proper treatment that was required?—Yes, that is perfectly true.

825. Therefore, when these men were qualified and went to other parts of the country they were practically incapable of carrying out the treatment?—They had to begin,

826. They had to begin to learn it?—Yes.

827. Where would they learn it from?—Unless they went to some special hospital.

828. How many special hospitals are there teaching it?—One that I know of. There are three or four small ones in the provinces, but they are very small.

829. So that the present teaching as it exists is totally inadequate?—I say so. Of course I am speaking of practical teaching in hospitals.

830. I do not mean theoretical teaching. The accommodation of the workhouses and infirmaries in the country is also inadequate?—The accommodation of the workhouses is very bad in some cases, but many of the workhouse infirmaries are perfectly modern buildings.

831. Where it can be carried out?—Where it can be carried out, if there were a staff to do it, to begin with. Generally speaking, there may be 500, 600, or 700 beds, and perhaps only one house surgeon, or at the outside two.

832. Would it be advisable in the buildings as they at present stand, to carry out sufficient isolation for the time being?—Perfectly, in many of the infirmaries.

833. Would they compare favourably with, say, Rochester Row?—They are very much better buildings.

834. And the power of separation would be good?—Quite good.

835. It would be necessary perhaps to add to the staff?—I should think it would be absolutely necessary. It is impossible with the present staff.

836. Both so far as the practical man who administers the treatment, and also the bacteriologist who is doing the actual work?—Yes.

837. Can you suggest any additional scheme which could be added to the general hospitals, and the workhouse and other infirmaries by which the Wassermann test could be carried out, and where the treatment could be carried out, such for example as the new dispensaries for a particular definite purpose?—I think special dispensaries might be made a great deal of. The subject was considered, I think, to a certain extent of special buildings in the final report of the Advisory Committee of the Army Medical Department on the treatment of Venereal Diseases and Scabies. They give the plans of a building there, but it is more for special in-patients. Still, the out-patients' department is well and simply planned.

838. The actual amount of accommodation for in-patients would be very very limited, would it not?—Yes. I should imagine one bed would serve for at least 100 cases a year for ordinary Salvarsan treatment.

839. Supposing, for example, there were these dispensaries scattered about the country where free Wassermann tests could be done, and where free treatment could be got, how are you going to get out of the question of the people not being known?—That is the reason why I would very much rather see it done by the general hospitals.

840. Do you think the fact of having special places for special treatment would interfere with the people going to them?—I think at present it would.

841. You think it would be as detrimental as notification?—No; it would not be so far-reaching in its effects.

842. Would you not recognise that it would practically in itself be a notification?—I am afraid it would; that is the reason I think so great advantage would accrue if venereal diseases were treated at the general hospitals that exist already throughout the country. Many of them are fine buildings.

843. But do you think it would be possible for the general hospitals to make sufficient accommodation for the first few years until this disease is cut down?—

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I think if there were subvention there is no reason why they should not.

844. Then you yourself, if you were free to act, would not think it would be necessary to put up new institutions of a small character in various crowded parts where people could get free treatment?—I think the less of that the better. The more it can be done in connection with general hospitals, the more freely patients would present themselves for treatment.

845. Supposing a private practitioner has a patient who cannot possibly afford to get this treatment, what routine would you suggest that practitioner should carry out in order that the patient should get it?—He should give him a letter to the hospital, if it is a district with a general hospital with wards for venereal patients, and on the receipt of the letter from his medical attendant saying he was a man who would benefit by immediate treatment at the hospital, he should be admitted.

846. Would that not be confidential notification?—To the hospital, yes; but to nobody else.

847. But those statistics would be available?—Yes, as statistics.

848. Would the names be available?—Only to the hospital. But there would be no double notification. That would be taken out of it, of course. That would not occur.

849. That would be practically notification?—To the hospital, yes.

850. Did you pay any attention at all in your investigations to the mercantile marine? Did you happen by chance to go to the Seamen's Hospital at Greenwich?—No. I think the only one I saw was at Cardiff.

851. There are a very large number of cases of syphilis at the Seamen's Hospital at Greenwich, because of the sailors coming in. What authority would deal with the mercantile marine?—The Board of Trade.

(*Sir Malcolm Morris.*) Is there any possibility, my Lord, of our being able to get any evidence in connection with the mercantile marine? They introduce syphilis into this country to a very large extent. Is there any possibility of getting at facts and figures?

(*Chairman.*) Yes, I think so. We will find how much is known, and see whether any more information can be got in future.

852. (*Sir Malcolm Morris.*) One question more on the causes of death of the Registrar-General. If the confidential cause of death was returned as a separate cause by the Registrar-General, what certificate should be given to the friends?—Simply a permit to bury, I think.

853. But if you want to know the cause of death, it would entail two certificates?—The ultimate cause would be given to the friends. I am only making the suggestion. There is the possibility you could give them the ultimate cause and the antecedent cause to the Registrar-General.

854. Do you think it might prove feasible to give two certificates, one which was given to the friends, and the true one which was given to the Registrar-General?—No; the one to the friends would be practically true—the ultimate cause.

855. Not always, is it?—No.

856. (*Sir David Brynmor Jones.*) Why did you not say that to me when I asked you about the cause of death? You are now using "cause" in a double sense. You say you think the ultimate cause is the cause that may be given to a friend, and the real cause to be given to some authority?—I said the ultimate and antecedent cause. One thing will lead to another.

(*Sir David Brynmor Jones.*) I said I did not want to have a metaphysical discussion. I wanted you to grapple with the difficulty of what the cause of death is for reasonably true statistical scientific purposes.

857. (*Mr. Lane.*) I see you have figures quoted from Fournier as to the amount of syphilis present amongst the innocent; that is syphilis not due to immorality. Those figures are given as 25 per cent. Is that your experience from what you have seen?—I think it is a very probable figure. It seems to me to be quite a moderate one.

858. It is a large figure?—It is a large figure. That is in his practice.

859. Fournier estimated that 25 per cent. of all women—it is all women—infected by syphilis were innocent?—Yes; 50 per cent. in his practice he was unable to account for, which practically means the same thing.

860. Twenty-five per cent. of all women infected by syphilis contracted the disease innocently?—I should think that is highly probable.

861. Then there would be a considerable percentage of men?—Yes.

862. So that altogether the percentage of syphilis in the innocent would amount to something like, shall we say, 30 or 33 per cent?—I do not like to go into figures, but you would get a large number. When I say a large number, I mean a great number of the males who are infected either as children or by other people in the house. I have seen several instances of infections of the arm and face with a kiss, to say nothing of doctors and nurses who are often in danger of infection.

863. I was coming to that. Of course, a large number of medical men suffer from this disease, syphilis insontium, and a large number of other people?—Yes.

864. Then a large number of cases of mediate contagion are also syphilis insontium. Mediate contagion is a term there was some difficulty about, but which is well recognised in the profession?—Yes.

865. That is to say, contagion through some intervening object?—Yes.

866. To clear up one thing, there was the possibility suggested of air-borne syphilis?—Yes.

867. We know that tubercle is very commonly air borne. It is well to clear it up by stating the fact that the germ of syphilis is a very delicate one and cannot flourish in the air. It differs from tubercle in that respect?—Yes. But still, there are many cases on record of infection that has been conveyed on objects like pipes and so on.

868. You would hardly call that air-borne?—No, not at all.

869. A further source of danger to the country is not the mercantile marine alone, but emigrants to this country?—I should imagine so.

870. There is no examination of them for syphilis or contagious disease?—The only place where it would appear very much nowadays would be in the port medical officer's work, when he examines the crews and passengers of ships coming from plague-infected ports.

871. He would examine them for plague, and examine them for ophthalmia trachoma?—That is the emigration men. It might not be the same man at all. I am referring to exotic diseases. It is examination for plague buboes, which often leads to the detection of the other.

872. If they are detected as syphilitic, are they allowed in the country?—I think they are. They will probably have to be put in one of our port hospitals, and kept there at the expense of the port.

873. Compulsorily do you mean?—No. If they are not fit to look after themselves—a man suffering from bubo, or anything of that kind.

874. You are quite in agreement with the majority of the medical profession that the contagious stages of the disease can be got rid of in two or three weeks?—Yes; there is no question about that. I think that is one thing we are quite sure of as regards the action of Salvarsan.

875. And therefore the necessity for early treatment is most important?—Absolutely, to get at it early.

876. Then there would be a large number of patients who would require to be treated with Salvarsan?—Yes.

877. If all patients are to be treated early in the disease, how could this be effected?—Of course, my suggestion was that the general hospitals throughout the country and throughout London were each to devote sufficient space. It is so difficult to say how much should be devoted because we have so little idea

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of the prevalence. Cases should be taken in without question as to their status or their morals.

878. (*Sir Malcolm Morris.*) You know they would oppose it with all their might?—If it were a case of asking them to do it at the expense wholly of the subscribers I suppose they would, but I should think they would require aid. I do not know whether it is practicable or not, but I think they ought to have the chance.

879. (*Mr. Lane.*) The working of the Insurance Act has come up once or twice. Do you think it could be remedied under the Insurance Act?—I should think to a certain extent. I think at the present moment the Insurance Act people could pay for the medical attendance and pay 10s. a week. They do not, of course, in these cases. I forgot that part of it. Under the present law that is not available.

880. Would you treat them with panel doctors with Salvarsan?—No, not unless the man had experience and skill.

881. You admit the dangers?—Certainly I admit the dangers of inexperience with it.

882. (*Mrs. Scharlieb.*) On page 20 you seem to be very much astonished and shocked at the extremely bad provision at general hospitals, both for the treatment of in-patients and out-patients with these diseases?—The absence of provision for in-patients.

883. Yes, and also that you found there was a difficulty in the treatment of women. There was a rule precluding the treatment of unmarried women suffering from venereal disease. They discouraged prostitutes from coming, and the maternity cases of the unmarried were not undertaken?—Yes; that is one of our largest hospitals.

884. Are not all these things extremely deleterious and inimical?—I quite agree with you. I think it is treating as a moral question what we want to get treated as a physical one.

885. We particularly want these women treated?—Of course we do.

886. Partly for their own sake, partly for the community, and partly for the purpose of teaching the medical students who will be the medical practitioners of to-morrow?—Yes.

887. Then as to the Poor Law infirmaries. Although you say so many of them are, so far as they go, very good, yet you say the workhouses themselves are not good for the treatment, with the rough walls, painted brick or plaster, worn board floors, and in some cases the sanitary arrangements were very bad. Is it not possible that improvements might be made in all those respects?—I have no doubt; but will you ask Sir Arthur Downes about that, because it does not come in my department. I have only a special licence from the Board allowing me to go and make my inspections.

888. But it did occur to you when you saw all this, that if the amenities were greater, the places cleaner?—If the wards were made wholesome, sanitary, cheerful, and proper ground provided to exercise, the officials acknowledge that they would have much less difficulty in keeping their patients long enough to treat them thoroughly.

889. Did it occur to you at all, in the case of women, that it would be an advantage to have women doctors?—I do not think that in any of the workhouses I saw they had women doctors. They had no experience of it. I think it would be a very good thing.

890. It would be better in some respects that they should be treated by women?—Yes.

891. (*Rev. J. Scott Lidgett.*) I did not quite hear one or two of your answers. I hope I am not asking the same thing over again. Did I understand you to say that in your judgment 25 per cent. of women infected were innocent?—That is Fournier's calculation, and he is a very great authority.

892. Do you agree with it?—I find nothing very startling in it.

893. Did you say 9 per cent. of men?—I did not.

894. Was that suggested to you?—No.

895. If I caught your figure aright, the end of it was that 33 per cent. represented the number. I think

Mr. Lane suggested that?—He asked me if I thought so.

(*Rev. J. Scott Lidgett.*) But you would not add a percentage of 25 and the percentage of 9 per cent. of men. I submit the 9 per cent. of men would reduce the 25 per cent. of the whole number by the addition. You have to get the total percentage of men and women by taking the gross quantities and fixing the percentage after the addition has been made, not by simply adding the 25 per cent. and 9 per cent. It is a mere matter of arithmetic in order to establish the percentage as far as we can.

(*Chairman.*) I think we have not got as far as any statement of the percentage at all. It is only suggested figures.

896. (*Rev. J. Scott Lidgett.*) Quite. I was anxious that the suggestion should not pass because it is obviously inexact. May I ask another question which has been raised? We have heard a good deal about the real cause of death in these cases, and you have taken one, on page 4, where the number of deaths is set forth from syphilis. We have also a large list of diseases which are due to the later manifestations of syphilis. When the practitioner has an opportunity of notifying under all these heads the indirect consequences of syphilis, what is the meaning of a death from syphilis? Does it mean it is a death from the primary attack of syphilis?—No. 99 times out of a 100 it means death from exhaustion, ulcerations, and late manifestations of syphilis, which have not any particular technical name. Whereas these other diseases were named long before they were known to be due to syphilis.

897. Is it possible for a case to arise where one practitioner would say "syphilis," and the certificate of another would say "general paralysis," "locomotor ataxy," or "aneurism"?—Quite possibly. It has only recently been discovered that some of these diseases are due to syphilis.

898. So that there are great variations of registration with regard to the causes of death, even where it is not desired to exclude syphilis?—Yes. Besides, I should imagine if the antecedent cause were put down as syphilis, and then it was followed by general paralysis of the insane, exhaustion, and death, or something to that effect, the Registrar-General would put it down as general paralysis.

899. Is syphilis frequently fatal in the first stages?—No, practically never nowadays.

900. So that really a large area of choice is given to the medical man certifying death as to whether he would take the ultimate cause as syphilis or a large number of secondary causes?—Yes, I think so.

901. (*Sir John Collie.*) You said that mild attacks of syphilis were not fatal, and of course one agrees?—Yes, the early attacks.

902. Would you agree that those mild attacks are still as liable to end in para-syphilis?—Quite so; some people say more so.

903. And therefore that a mild attack may be as serious, as fatal, as severe as its secondary effects?—Yes. "Secondary" is perhaps using a word usually employed technically in connection with syphilis. It is not a secondary effect; it is a resultant effect.

904. Would the early use of neosalvarsan very much diminish the infectivity of syphilis?—Yes.

905. Arising from that, do you think anything could be done whereby the infectivity could be diminished or removed by a preliminary injection of neo-salvarsan prior to admission to an institution, in those cases where it is absolutely advisable they should go?—You see the position as far as I know it at present is this: If you get an early case before any secondary symptoms have appeared, salvarsan is given and perhaps a course of mercury commenced at the same time, the patient may never develop any further symptoms; he may never get into the stage when his mucous membranes and skin become affected.

906. I do not think you follow my question?—You want to put a man into an institution and make him fit to go in there by one injection of salvarsan?

907. Yes?—It would not be possible to say that. You cannot cure it so quickly as all that.

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[Continued.]

908. I do not think you quite appreciate what I am putting. You said that the difficulty of getting syphilis treated at the important stage of it, when it was more infective, was insuperable, inasmuch as the London hospitals and other institutions would not receive these cases?—Yes.

909. I suggest to you, and I want your opinion whether or not it is feasible that a preliminary short course of neo-salvarsan (so as to diminish that infectivity) would so influence those institutions that there would be less hostility to the reception of those patients than there is at present?—I do not think they would want to receive them after that. The time for teaching purposes is the early stage.

910. I am assuming there is a stage where it is advisable, from the public health point of view, to treat them at the early stage?—Yes.

911. Do you agree?—I do not quite understand where you want to treat them. Do you suggest treating them in an institution for the treatment of these diseases?

912. Yes.—That is what I want to avoid in my idea, because I think it will be very difficult to put patients into special institutions for the treatment of these diseases without giving a certain amount of stigma.

913. I did not say special institutions; I said the large hospitals?—Where do you prepare them for the large hospitals?

914. I asked you if you thought these preliminary injections would have the effect of diminishing the present objections to those institutions?—I am afraid I cannot follow that.

(*Dr. Newsholme*.) I think I can make the point clear. Sir John Collie's question is this: Imagine a case of diphtheria. Before sending the case of diphtheria to the Asylums Board hospital, quite frequently a dose of anti-toxin is given in order to save time. Similarly in regard to syphilis, Sir John Collie suggests that a great deal of time which is valuable in the prevention of disease might be saved if neosalvarsan were given before the patient went to the hospital. Is that your point?

(*Sir John Collie*.) Yes.

(*Witness*.) I understand perfectly.

915. (*Sir John Collie*.) Do you agree then?—Of course I agree that the early administration would be an extraordinarily good idea, the earlier the better. But I have doubts as to whether the houses many such cases come out of would be suitable places for doing it. Of course it could be done perfectly well, but I would prefer to see it done in a proper operating theatre.

916. My next question is this, and I want you to answer it, as it were, apart from any question of public health, but just as a doctor. Take the case of a man who dies from general paralysis of the insane, tabes, or, aneurysm; would you say he died of syphilis, not for the statistical purposes of the Registrar-General, or for other purposes, but because the cause of death was syphilis?—To my mind, yes.

917. I want to make that quite clear. Then, on this point about the certificate, I would also like to ask you this. If Parliament passed an Act making it compulsory that death certificates should be sent direct from the doctor to the Registrar-General, would the returns of deaths from syphilis be totally different from those which you have now?—I believe so.

918. Are you aware of any provision in the Insurance Act—I am referring to the sanatorium benefit—whereby syphilis could be treated under that Act?—It certainly could be in that way as a sanatorium benefit.

919. (*Mrs. Burgwin*.) I gather you said the statistics for the army and the navy were very much improved on these diseases to what they were 17 years ago?—You mean less?

920. There is less of it?—Yes, a lower rate.

921. I think you stated as the reason, that they know so much more; they are more protected?—Yes, I quite agree; I did say that.

922. So that we cannot assume there is a higher moral tone amongst these men; but you say they are now able to guard themselves against the result? Is

there a higher moral tone?—I believe, very much. I meant to say so.

923. I did not gather that. Then I am not clear about one other point. When a man in the army or navy is found to be incurable, I understand he is expelled from the service?—I suppose so.

924. So that you expel an infectious person?—Quite so.

925. You put him out into the community with no restrictions upon him whatever?—Yes. The probability is by that time he is not so infective as he was before.

926. You expel him because he is incurable?—He is no further use to the country, I suppose. Just as a mere layman, I feel the army and navy officials have discharged their duties when they have done all they can, and he is thrown out on the community.

(*Chairman*.) Of course, we have not the army evidence yet, but we do know that is the practice in the navy.

927. (*Mrs. Burgwin*.) I have asked and been told that is so. Then I come to this point. If a person has smallpox and wilfully goes out into society in a public vehicle, or anything of that kind, is that a penal offence or not?—Yes, you can be prosecuted for it.

928. Then, does it not seem a fair inference with regard to these very infective people, it ought also to be a penal offence if by any means they become a menace to society. Would you agree with that?—I think it would be the very worst way to go about getting rid of the disease. There is quite enough concealment already without helping it with penal measures. That is my view of it.

929. I am not asking about penal measures. I say in our law there is one disease we treat in that way, because the disease is obvious and the other secret. I did not quite gather what you meant when you said we want a franker attitude of the public?—Yes, we want to recognise there is such a thing as venereal disease, and we want to get the people instructed as to what is the best thing to do when they have got it.

930. The point I want to get at is as to the franker attitude; not that we should look upon it as a less heinous offence—this gross immorality?—It does not follow in the least that it is due to immorality. That is the attitude of mind I deprecate.

931. From the way I read these reports, the innocent are so many, and the others, I take it, are not innocent?—The figures given here, as far as I have gone into them, were Fournier's figures, in which he reckoned only 25 per cent. of women. What about all the congenital cases; the wretched little children?

932. That I recognise?—You do not know how many they may be.

933. We feel what we have wanted from every witness would be to help us to see how far we can get a higher moral tone, not only through, I was going to say, punishment?—You will never get a higher moral tone through concealing things. It is much more likely you will by looking things straight in the face and saying, "Here is a disease; it has to be cured." Of course, anything that can be done in improving the morals of people in general would be so much to the good.

934. Then you think that spreading knowledge of this disease will bring that about?—When I said spreading knowledge of the disease, I meant spreading knowledge of everything connected with it. The officers have their men up and they explain the nature of the disease. They explain that is unnecessary for young men to indulge in these amusements; that they are no more manly for doing it, but all the more for keeping off it; and they explain how it will come to them when it does come, and why they are to go to their doctor about it. That is done in the army now. I have no knowledge of it officially. It is simply what I have learned about it.

935. We have not compulsory service and, therefore, it is a minor quantity in the army and navy as compared with the total population?—Yes.

936. I notice one part of your report where you speak of the enormous number in workhouses, rescue homes, and all those places?—Yes.

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[Continued.]

937. (*Dr. Newsholme.*) I take it one the chief reasons why the Local Government Board had this inquiry on which you reported, at the time they did have it, was that the improved means of diagnosis and of treatment gave a better prospect than at any previous time of successfully tackling the disease?—Quite so. It was a revolution in the methods of treatment.

938. As bearing on your report, also, I think you will confirm me when I say that during the spring of last year frequently you were asked as to when your report would be issued?—Yes.

939. And the facts at that time which were intended to be collected had all been collected?—Yes.

940. And you were prevented from writing it in the early spring of this year by the fact that other pressing professional matters intervened?—Yes, and on account of illness of the staff. We were very short-handed.

941. So that there was no rushing the report out; on the contrary, it was somewhat delayed?—The only rushing out was that I did not get the usual number of revises; and that was due to my absence; so that you will find there are several printer's errors.

942. You have been asked a question with regard to the notification of venereal diseases. Sir Almeric FitzRoy asked you about the notification of ophthalmia of the new-born and whether that could be possibly quoted as a precedent for the immediate notification of other venereal diseases?—Yes.

943. Will you tell us what distinction you draw between notification of ophthalmia of the new-born and notification of venereal diseases in the adult?—Yes. To begin with, the elementary distinction between the two is, that it is not generally recognised at all that ophthalmia neonatorum is a venereal disease, although it is in 60 to 80 per cent. of the cases.

944. Only a percentage of ophthalmia of the new-born is due to venereal disease?—About 60 to 80 per cent.

945. So that it is quite likely in any given case it has nothing to do with venereal diseases?—It may have nothing.

946. You have mentioned another grave objection to notification under the present conditions of medical practice. That was the prevalence of quackery—unqualified practice?—Yes.

947. Already a great number of cases of venereal disease are attended by unqualified practitioners?—Yes, a great number; many during the most important stage of all, that is the early one.

948. A respectable young man getting venereal disease is ashamed to go to his family doctor?—That is it.

949. He goes to a herbalist or chemist, and is treated by those people, and the most valuable time, so far as preventive treatment is concerned, is thus lost?—Yes, certainly.

950. There are a number of details in the report issued by the Privy Council on that point, are there not?—Yes.

951. And there are many further details in the reports received from the medical officers of health throughout the country dealing with that question, which we shall shortly be getting out for the Commission?—Yes.

952. Then you advocated the attendance at hospital of patients with venereal disease. That would undoubtedly improve the statistics of the incidence of disease to that extent?—At the hospital?

953. Yes?—They are all available there.

954. But, of course, that would not give you information of cases not being treated at hospitals?—No.

955. But, even so far as the hospital cases are concerned, it would merely give you statistics and not any information on which you could take administrative action?—Yes.

956. One important point has not been elicited; that is that your report deals only with England and Wales?—Yes.

957. It has nothing to do with Scotland or Ireland?—No.

958. The question of Poor Law institutions as places for the treatment of venereal diseases was mentioned. I gather from your report that you advocate the treatment of these diseases in general hospitals, preferably to Poor Law institutions?—Yes, entirely.

959. On the question of the possibility of there being further accommodation in Poor Law institutions now so many people have old age pensions, in actual fact I believe I am right in suggesting to you, so far as sick paupers are concerned, in all probability the giving of old age pensions to people over 70 will make no difference whatever in the accommodation?—They might still come in. I have known many cases.

960. At the present time, I believe I am right in saying it is making no difference whatever, and so far as sick paupers over 70 are concerned, it is not making a great difference. With regard to the question of compulsory detention of infective persons, I think you did not advocate that in your report?—No, I did not.

961. The chief reason for that being, that by means of better methods of treatment one can get the infectivity of persons so quickly removed that the necessity for compulsory detention scarcely arises, or probably will not arise?—That, and, of course, there is always the question of deterring patients from submitting themselves. That is the principal thing.

962. Then you advocated also the provision of tests for diagnosis of syphilis and gonorrhœa?—Yes.

963. And the question was raised as to whether it was desirable to have these tests applied in the different institutions; I gathered you were of opinion that would be a waste of effort to do this in the smaller institutions?—It would be a great waste of money and probably efficiency too. You would get inefficient Wassermanns done.

964. It is more convenient and much more economical to have it done in large central institutions?—Much better; there is no question about it.

965. And those centres might preferably, in some instances, be larger than the counties themselves. There might be several counties together, say at a university centre?—Yes.

966. I do not know whether I showed you a memorandum that I prepared for the Departmental Committee on Tuberculosis, on this question of the laboratory assistance in the diagnosis of disease in which this point was gone into in full, and the Departmental Committee on Tuberculosis gave the following expression of opinion. I will ask you afterwards whether you agree with it. They said: "In the opinion of the Committee the value to the community of the scheme of research recommended in this report will not be fully secured unless it is accompanied by a general extension throughout the United Kingdom of clinical laboratories for the better diagnosis and treatment of disease, provided out of funds other than those available under the National Insurance Act." Do you agree with that expression of opinion?—Yes, I quite agree.

967. A great deal of questioning has taken place as to primary and secondary, or remote and immediate causes of death. Supposing we know that locomotor ataxy is originally always caused by syphilis, is there not a great practical advantage in reporting the death as due to locomotor ataxy rather than merely as syphilis? I will leave out the word "merely" for the moment and say "syphilis"?—If the connection between the two is recognised.

968. I take as my datum line that the connection was always there?—It simply depends upon whether it is recognised.

969. No. Locomotor ataxy, being always due to syphilis, is it not a more practical thing to return death as due to locomotor ataxy than to syphilis? You cannot return it as both. You may put it on the certificate as both; but when Dr. Stevenson at the Registrar-General's office comes to the final analysis, he cannot put the deaths under the two headings; he has to choose?—Yes.

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[Continued.]

970. Which do you regard it as better he should put it under?—I think locomotor ataxy is more informative from my point of view than syphilis.

(*Dr. Newsholme.*) Everybody nowadays does know this, or will know it in the next few months.

(*Sir David Brynmor Jones.*) The witness does not say so.

(*Sir Malcolm Morris.*) Every doctor does not know it.

(*Rev. J. Scott Lidgett.*) Perhaps Dr. Newsholme can help some of us at this stage. If you go on notifying in this way general paralysis and locomotor ataxy, by a process of exhaustion, what do you leave as a death to be registered as syphilis?

(*Dr. Newsholme.*) It is a somewhat difficult question, and I think I am right in saying that Dr. Stevenson will be called again.

(*Chairman.*) Yes.

(*Dr. Newsholme.*) I think it will be preferable for me to leave Dr. Stevenson, who has the full responsibility for compiling these statistics, to present the facts as to that.

(*Witness.*) I should say you would be right in saying, would you not, that it includes all forms of syphilis which have not other names? Many groups of symptoms were named before the connection between them and syphilis was discovered.

971. (*Dr. Newsholme.*) I think that is sufficient for the present. I have here a remark from Dr. Stevenson, and I will ask you whether you agree with it. I asked him to get me out for the purposes of this Commission—and this answers Dr. Scott Lidgett's point—all the deaths from syphilis, setting out not only the primary cause, but the later cause—the more immediate cause—and he says here: "I can have the secondary causes for syphilis prepared all right. As to past syphilis as a remote cause, it is quite utopian to return in the national statistics all the deaths under the heading of syphilis." I am not giving his exact words; it is a slight extension of his sentence, but that is what it means. Then he goes on: "In accordance with international practice in the statistics of different countries we"—that is, the Registrar-General's office—"ask only for causes present at the time of death (*see Manual*, page xxxviii), but if we asked for remote causes we should but seldom get the information, especially in the case of syphilis, and when supplied it might be largely fanciful and coloured by the practitioner's views of general pathology." That is a fair statement of the difficulties of the case?—Yes.

972. Now turning to confidential registration of causes of death, a question was asked as to making a separate scheme for registration of venereal diseases from that for general diseases. I am not sure that

there was not some ambiguity on that point. You would not be in favour of any scheme for the special registration of deaths from venereal diseases?—I have not even thought of the question on that line.

973. We will take your view at the present moment. Would you be in favour of any scheme which provided that if a given death was ascribed to venereal disease, in that case the practitioner should not hand over the certificate to the relative, but should send it to the General Register Office?—It would have to be done better than that, because that would be equivalent to saying the man died of venereal disease.

974. So that following that point a step further, if there is to be confidential registration of venereal disease, there must be confidential registration of all diseases. You would agree with that?—I do not think it quite follows.

975. Would you be of opinion that, if there were to be confidential registration of venereal diseases, there ought also to be confidential registration of all other diseases?—Personally, yes, I think it would be an improvement.

976. (*Chairman.*) Do you know what classes make use of quacks most?—It is not limited to any class in my experience. There are people of a certain temperament in every class who make use of them.

977. Is the reason for going to a quack that he is supposed to be more economical or more confidential?—Entirely that the quack does not know the patient, and so nobody knows anything about it. Very often it commences with an advertisement of some quack who supplies medicines through the post.

978. If all advertisements of that class were put a stop to by law, would that tend to the disappearance of the quack?—Of that particular quack; but it is a very difficult thing to do, I should imagine.

979. Advertisements of that class have been prohibited in some countries?—In Australia they are prohibited on all goods entering; but I do not think there is any prohibition of goods made there.

980. There is only one other question. I am not quite certain whether you will be able to answer it. I suppose either the panel doctor or the Committee would have to state that a man who applied for a sick allowance is suffering from venereal disease?—I suppose so.

981. That would have the effect, would it not, of a public notification?—It would in a way. It will mean that he will not go to his panel doctor.

982. Then to some extent it will defeat the object of the Insurance Act?—Very much so. It will tend to do so, certainly.

(*Chairman.*) We are very much obliged to you for your evidence.

The witness withdrew.

Adjourned to Monday next at 2.30 p.m.

FOURTH DAY.

Monday, 17th November 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Lieut.-Colonel B. H. SCOTT called and examined.

983. (*Chairman.*) What office do you hold now?—I am Deputy Assistant Director-General at the War Office in charge of the Medical Statistical Branch of the War Office, and I represent the Director-General here.

984. How long have you held that office?—Over three years.

985. During that time have you given special attention to the figures of the diseases with which we are concerned?—All the medical statistics come under me since I have held the appointment.

986. You have given us some very valuable tables showing the rejection of recruits from venereal diseases since 1890, and also the numbers and ratios per thousand of admission to hospital and of the continuously sick, and also of the invalided of the Army at home and in India?—Yes.

987. I propose to take the recruits first. I assume no special test is applied, and the medical examination in that case is of the ordinary kind?—No, I may say that represents that the recruit has no active signs of syphilis about him when he comes up for the medical examination.

988. He is not subjected to any of the special modern tests for these diseases?—No, the recruiting medical officers have not the time.

989. Then is it possible that recruits who are accepted might be suffering from latent or congenital forms of these diseases?—Yes, it is quite possible.

990. Might disease in these forms show itself after a recruit had joined the ranks?—It probably would do so.

991. Even if he were infective?—Even if he were infective.

992. In referring to your figures, I see the percentage of rejections from all causes have fallen from 39·74 in 1890 to 23·79 in 1911–12?—Yes.

993. Does that imply lowering your standard of fitness, or does it indicate improvement in general health amongst the classes from which the recruits are drawn?—The recruiting standards vary according to the requirements of the various arms of the service. When a regiment is up to strength the standard is raised, and is raised generally an inch in height, first of all. If that does not stop the supply, it is put up another inch in height. If that does not suffice, then they begin putting up the chest as well. That does not rest with the Medical Department; it rests with the recruiting authorities; but that is how they gauge the demand. Conversely, when a regiment or an arm of the service is short of recruits, the standards are lowered, but they are not lowered below the minimum of 5 feet 3 inches in height, and 33 inches chest for the infantry.

994. Then this large improvement in the number of rejections cannot be taken as a certain test of the improvement in the general physique of the community?—No. From my experience as medical inspector of recruits, I am afraid it cannot be taken

that way. I think that is due to the appointment of medical inspectors of recruits in commands whose duties are to equalise recruiting. They go round to every dépôt in the command watching these lads coming on under their physical training. You see them at their gymnastics. In Scotland I used to try to see them generally every month, and, in most cases, I saw every man three times before he left the dépôt, in that way I could watch and check measurements and weights, and see how the lads were coming on, and hear the reports of the gymnastic instructors before finally coming to a decision as to whether a man was unlikely to become an efficient soldier after three months' trial. As to the other improvement, in the last few years a great deal of attention has been paid to the instruction of recruiters before they are sent out; that is to say, the non-commissioned officers and men. Our corps has taken that up very much in conjunction with recruiting officers, and the consequence is there are lots of men with palpable flaws who do not get in nowadays to the medical officer for examination; he is rejected by the recruiting sergeants. I mean to say a man who is under height or who has bad vision, or is too low in his chest measurement, or suffers from some obvious deformities of his legs or feet—many of those cases are now not sent in to the medical officer, and, therefore, the medical rejections have fallen. I think that is really the chief cause for the reduction of medical rejections for all causes.

995. I see you have shown no rejection of the recruits from gonorrhœa. Does that disease never appear in the men?—No, because in the recruiting return that change was only made last year. If you notice, for 1911–12 there are two sets of figures given. It is .14 percentage for syphilis, and .06 representing other venereal diseases. It is only for 1911–12 that those figures can be got.

996. Then, the other venereal diseases which you will include in a short time, will include gonorrhœa?—“Other venereal diseases” would include rejections for gonorrhœa.

997. You give us your reductions for syphilis; from .63 in 1890, to .14 in 1911–12?—Yes.

998. From what you have said we must not take that as indicating a general improvement in health, because it is qualified by the considerations which you have pointed out to us?—I am not quite sure how far those statements that I have made with regard to recruiters will apply to the special case of syphilis. The inference from those figures is that there is less syphilis amongst the civil population from which we draw our recruits. I have no doubt the old soldier knows probably enough about syphilis to recognize any active external signs of it; but there are many cases that he would not be able to spot.

999. As has been represented to us, do you think the knowledge possessed by syphilitic persons amongst the civil population prevents them presenting them-

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[Continued.]

selves for inspection?—Yes; I am quite sure a recruiting sergeant would tell him to go and get cured of his active symptoms before coming up for medical examination.

1000. So that the figures must be governed to some extent by that factor?—Yes. I think that factor should be borne in mind.

1001. Has there been any variation in the real average age of intending recruits during the period which your figures cover?—No, practically not.

1002. Now what do you consider about the average age? Of course we all know they are not up to the average?—18 to 20 years of age.

1003. But there must be a percentage of them still who are under 18 years of age?—No, I do not think there are so many under 18 for the regulars. I think for the special reserve possibly there may be some young boys who get in, but not for the regulars; at all events an inappreciable number.

1004. Do you demand birth certificates?—The recruiting officer does.

1005. And sees them?—Yes.

1006. So that there is not any very great probability of the men getting in to any considerable extent under the regulation age?—I do not think so. Of course there is always the odd chance if the recruit is wily enough, as I have known an instance, of his getting his elder brother's birth certificate. But I take it that is very rare.

1007. You give separate figures for rejections after three months?—Yes.

1008. Do those figures mean men who are rejected after acceptance, or men in whom a pre-existing disease has declared itself after inspection?—It may be either. That three months represents the time they are at the dépôt. The reason why we included the three months is that we do not count those as invalids from the army, because the large majority of those men are men who have been taken by medical examiners of recruits possibly on the chance of their improving, and who have failed to improve. They are what you might say poor recruits; but many of them are worth trying. Sometimes they break down, and sometimes they do not, and go on. If they do break down, it is not a fair thing to debit the invaliding of the army with those, many of them congenital debilities which really existed at the time they enlisted.

1009. I see that the percentage of the rejections from syphilis under three months shows a slight tendency to increase. Is there any way of accounting for that?—Where is that?

1010. In the central column of your form. You run up to 1911. For the earlier years it has been down as low as 1 and 2; in fact the earlier years show a better result.

1011. (*Dr. Newsholme.*) Are these per thousand recruits or per thousand totals?—Those are the actuals.

(*Dr. Newsholme.*) On different totals?

(*Chairman.*) Yes.

1012. On the whole the later years are higher than the earlier ones. There may be nothing in it, but it merely struck me?—As far as actuals go, but not from ratios.

1013. No; not from ratios. From your general impressions of intending recruits as a whole, do you think there is any evidence of less prevalence of these diseases among the classes from which recruits come?—I would not go so far as to say that altogether, because my last experience of recruiting was as medical inspector up in Scotland, and I did not see them until after they had joined the dépôt. For instance, I saw none of the men who were rejected on inspection; I did not see them until after they had been passed by the medical examiner of recruits.

1014. I will now turn to the tables which the members of the Commission have got which deal with the army at home. After 1903 the classification of venereal diseases was altered. Could you say why that was done?—That was done after the report of the Army Medical Advisory Board, but I cannot give specific reasons as to why it was done.

1015. Then if we had the figures for primary and secondary syphilis for an earlier period, should we obtain a direct comparison with the later period?—Yes, we should undoubtedly.

1016. The figures after 1896 discriminate ulcer. In what category after 1903 would these cases be included?—Under soft chancre, unless it developed afterwards—unless within the last year or so treponema had been obtained from the sore; then it would go into syphilis; the greater facilities for mere accurate diagnosis showed some of these to be non-venereal, so in recent years they have been retained among diseases of the generative system.

1017. Then by those additions we can make these tables consistent throughout the whole period?—Yes, reasonably so.

1018. In your figures for admission to hospital, re-admissions are included, I suppose?—Yes, re-admissions are included.

1019. That is, of course, one of the vitiating factors that we have had to deal with in other cases. Is it possible to give separate figures for cases?—To give separate figures for primary and for secondary?

1020. For individual cases; that is to say, the same man does not get returned more than once?—That has been obviated the last three years by that table which I have brought down with me. That shows the absolute number of fresh cases every year.

1021. Occurring during the year which is specified? Yes; but that change was only made in 1910. That shows for the United Kingdom the absolute number of fresh notifications of primary syphilis for the year.

1022. Perhaps I had better read these cases out. The United Kingdom returns for 1910 show 1,379 fresh cases, or 12·7 per 1,000 of the force, I suppose?—The mean annual strength.

1023. 1911 gives 1,365, or 12·5 per 1,000; and 1912 gives 1,237, or 11·5 per 1,000. I see you give only one year for India?—Yes, I have only one for India.

1024. Is it possible to get further figures for India; probably not?—I do not know. I could write out and try for you.

1025. We will let you know if we consider it desirable to ask for those figures; meanwhile, India for the one year 1912 returned 488 fresh cases, or 6·9 per 1,000?—Yes.

1026. Could you not give us any idea of the percentage in your big table of the cases which are really re-admissions?—For the earlier years I am afraid not, because they have not been kept up. But we have decided now to issue a circular letter that all cases of relapses are to be marked in the admission and discharge book as such, and the relapses will be mentioned in the annual transactions.

1027. So that in future years these cases will be carefully discriminated?—I hope so.

1028. Do you think that in the earlier years there would be a relatively higher number of re-admissions owing to the improved treatment of later years?—Yes.

1029. In the period from 1888 to 1903, in which you have discriminated between primary and secondary syphilis, I note that primary generally, but not always, gives the higher figure of the two?—Yes.

1030. Secondary cases would be the measure of the failure to cure at the earlier stage, would it not?—I think it is rather hard to explain that altogether. In a certain number of cases, especially in India, the men obtain private treatment themselves, and they will continue that private treatment. Very often it is Government medicine; but it is got from the assistant surgeons of the hospital, and the men do it to avoid having to report sick, and for their own good. I mean, some of them are sensible enough to keep up continuous treatment. Speaking with regard to the period 1890 to 1895, I know myself what was going on in India; but what proportion of men did that I am not prepared to say.

1031. Then we must take it that some of these secondary syphilis returns mean men who were treated for primary in a private underhand sort of way, and, therefore, did not get the full benefit of the medical administration?—It might be both ways. He might have come to hospital with the primary, and then

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knowing he had syphilis, and having been told by the medical officer that he should try and remain more or less under constant treatment, under supervision of course, he would then carry on that treatment himself without coming to hospital, and so not getting an admission. Conversely, he may have been treated in the Bazaar for a primary sore which healed up in due course, and then he eventually broke down with bad secondaries and had to come into hospital.

1032. May we take it the soldiers now are under close medical supervision during their period of service?—Much closer. The relations between the R.A.M.C. and the men themselves are much more intimate in that way, and between the commanding officers too.

1033. Is concealment of venereal disease a military offence now, as it used to be in my younger days?—It is an offence if it is pushed; but, personally, I do not think there is any degree of concealment; there is practically none.

1034. It is not punished now?—It is punished, if they are "crimed" for it.

1035. Do you think there is much concealment now?—No, I do not, because it would be easily checked by one of the medical examinations as to their fitness, which soldiers have frequently to undergo.

1036. And some of these inspections are much safer?—Much safer. You get a general examination of the heart, lungs, a *visé* of the medical history sheet, and, of course, venereal as well.

1037. We were told by the naval medical authorities that the bluejackets now show a positive anxiety to be tested, and they present themselves voluntarily to the doctor for that purpose. Do you find the same tendency now in the army?—To be tested by Wassermann?

1038. Yes?—I am afraid I could not speak on that. I should like some medical officer who has been more in touch with the units during the last few years to speak as to that. But, as I said, the relationship between the R.A.M.C. and the men now is so very much better than, if men wanted that done, I am sure it would be done.

1039. You do not think there is any eagerness to be examined, as we are assured there is in the navy?—I could not answer that. It is a question for the officers in the commands who are in charge of venereal treatment.

1040. You have told us that in India soldiers do have recourse to quacks?—I do not think to any great extent, and I did not so much mean quacks as having Government medicine from the assistant surgeons of the hospital who, as you know, are the subordinate medical department.

1041. They give it out on their own account, of course?—If a man chooses to go up and wants to continue, the medical officer would always put him on a list and the assistant surgeon would give him a dose every day.

1042. But the medical assistant surgeons may, in some cases, do a little treatment on their own account?—Possibly, but I know nothing about that.

1043. In England do you think that as a result of advertisements, of which there are too many, soldiers have recourse to quackery?—There is always a certain type of man who will take quack medicine. The army is more free of that type of man than civil life generally; still, an occasional man in the army has been found in possession of quack medicines and of advertisements, not only for venereal, but for other diseases as well.

1044. In the army do you treat any cases of venereal disease as out-patients?—Yes. After a man has had his admission to a hospital, he is put on the Syphilis Register and he comes up and attends once a week, and under the old mercurial system he receives mercurial treatment, intramuscularly. Of course now in all the larger stations it is salvarsan and mercury; but for details of that treatment, may I suggest that Lieut.-Colonel Gibbard and Major Harrison should be called.

1045. Then all such cases which become really out-patients from the point of view of treatment appear in

your returns as admissions?—They would have one admission, and they would have another admission if they broke down with active syphilis; but as long as they kept clear of active syphilis with the weekly mercurial treatment, they would not be shown as admissions.

1046. The table of admissions per 1,000 of strength shows a fall from all diseases of from 700·9 in 1888 to 346·4 in 1912. That seems a very satisfactory result. Does that really mean better health on the part of the men entering the army, or does it mean more effective medical treatment or healthier conditions?—No; I do not think we can claim it as better health on the part of the men entering the army at all. It is the awakening of sanitation and personal hygiene in the army.

1047. We may look upon it as due to improved hygienic conditions throughout the army service generally?—Both on the part urged by medical officers and the interest that commanding officers and other people also take in the men—the regiments themselves, especially if much affected with venereal. The first thing they do if they go on service, especially in India, is that they will fill the line of communication and base hospitals and possibly be sent back to England again. The consequence is, with regard to a regiment that is known to be bad with venereal, the chances are if there is any minor expedition going on, they will be left behind and not taken. Therefore it is to the interests of everyone that their venereal should be kept in hand, and it is kept in hand now.

1048. In that same period admissions show a drop from all venereal diseases from 224·5 to 56·5, and the percentage of admissions from venereal diseases has dropped from 30·7 to 16·3. That is a very satisfactory result, is it not?—Yes.

1049. But though there has been a general tendency of a downward character, there has been some marked fluctuation. I notice that the year 1910 gives 18·9 per 1,000 admissions, whereas 1900 gives only 14·5. I note also that 1900 and 1901 both give less figures than 1912. Is there any possible way of accounting for those fluctuations?—No. I have looked up the annual reports for those years and also for some earlier years, and I am afraid I cannot offer any explanation of those.

1050. (Canon Horsley.) What was the date of the Boer War?—1899 to 1902. As far as the United Kingdom is concerned, that certainly would have an influence.

1051. (Chairman.) Then during the nine years of your present classification, syphilis shows a fall from 34·8 to 18·7 in admissions per 1,000. Is that fall, which is a marked one, due to less infection, do you think, or to improved treatment in these recent years?—I think that is largely due to improved treatment, because that was after the Medical Advisory Committee was held, where continuous treatment was urged and also to greater facilities being given for more accurate diagnosis.

1052. In those same nine years, soft chancre shows an unbroken fall from 19 to 8·3 per 1,000. May that satisfactory diminution be attributed to better treatment?—I think all the diminutions in this period are due first of all to more accurate diagnosis, greater temperance and abstemiousness in the army, and also to the White Cross League, and other people who have been very active during that time. I think it is abstemiousness and temperance in the army, and it is a better character of man when he comes into the army, too. He is made more of, and he becomes a better fellow generally due to the influence of the non-commissioned officers and the commissioned officers of his unit. Also, of later years the men are very much better done in barracks; they are made more comfortable. It is not the case now that the only comfortable place they can go to is outside barracks in some of those shebeens where there is warmth &c. They are very much better done in their own canteens and coffee-shops, and they have institutions and entertainments. I think that applies both equally to at home and to India, but very much to India. In addition to

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that, there is a better line of treatment, continuous treatment, which has been going on.

1053. I suppose we may take it that gonorrhœa is comparable throughout the whole period covered by your figures?—Yes, I think so.

1054. Now gonorrhœa admissions have fallen from 91.1 to 29.5, and the decline in the past nine years has been progressive. Do you think that is also due rather to more effective treatment than to any diminution in the disease among the civil population?—I think that reduction generally, taking it from the period when it began, 1890, is so great that I am afraid the medical department cannot claim everything for it. There are those other influences which come in, and they apply to all of them.

1055. In your table of constantly sick, what do you define under the heading of constantly sick?—It is the average number of men sick in hospital day by day.

1056. What constitutes constant sickness? How much sickness do you think?—The number of admissions to hospital and the duration of their stay.

1057. I mean how many admissions to hospital or how rapid a succession of admissions to hospital would constitute "constantly"?

1058. (*Dr. Newsholme.*) Is it not the average number in the hospital, taken the whole year round?—Yes.

1059. (*Rev. J. Scott Lidgett.*) It is not a denomination of sickness in the individual, but the numbers in the institution as a whole?—It is the average number constantly sick in the hospital the year round for those diseases.

1060. (*Chairman.*) I see. It is not a special class?—No, it is purely statistical.

1061. Then those constantly sick returns might be affected by frequent re-infections, or they might in some cases be cases which did not yield easily to treatment?—Yes.

1062. In the last nine years syphilis decreases as a cause of constant sickness from 4.09 to 1.72, and gonorrhœa decreases from 4.35 to 3.07. Apparently, therefore, syphilis has decreased in a higher proportion than gonorrhœa as accounting for constant sickness. Is there any explanation of that?—No; except that I think I may fairly say during those last nine years the continuous treatment for syphilis has been more thoroughly carried out than the latest and most scientific treatment for gonorrhœa. It is practically only during the last few years that the latest methods of treatment for gonorrhœa have been taken up, and, of course, as far as gonorrhœa is concerned, the men themselves have learned other ways of avoiding it.

1063. The constantly sick returns for all diseases show a remarkable fall from 44.29 to 19.50 per 1,000, and the percentage of venereal disease to all other diseases falls from 38.5 to 28.3. That must, surely, indicate a considerable improvement in the health of the army as a whole?—It is a great improvement.

1064. It seems to me very great. Then the invalids table. Primary syphilis practically never appears. I suppose we may eliminate it from that?—Yes, because there are practically no invalids from primary syphilis.

1065. You return two or three cases, I see?—Just an odd case here and there, probably phagedenic.

1066. Syphilis as an invaliding cause in 1888 to 1912 is .93 to .08, and the total invalids from this cause last year is only 10. That seems another very satisfactory thing?—Yes, that is true.

1067. But on the other hand invaliding from gonorrhœa increased from .03 to .12, and that disease accounted for 15 cases invalided last year. That really comes from the causes you have already given?—I take it that comes more from the complications of gonorrhœa. It is not so much the absolute gonorrhœa itself, as that these men get gonorrhœal arthritis and gonorrhœa ophthalmia and may lose an eye, or they get other diseases resulting from gonorrhœa, and they would be debited to gonorrhœa as the cause of the disease.

1068. Turning to India, the forms are drawn up in exactly the same way as for the home army, are they not?—Yes.

1069. So that we may regard them as directly comparable?—Yes.

1070. The admissions show a very heavy fall in venereal disease generally?—Yes.

1071. Venereal disease stood at 461.9 in 1890 and at 55.5 in 1912; that is one less than the corresponding figure for the army in the United Kingdom?—Yes.

1072. So that from that point of view, the health of the army in India is at least as good as that of the army at home?—Yes; except the severe cases where there exists a combination of syphilis and malaria.

1073. But taking venereal diseases as a whole, we find the fall in India has been greater in amount than it has been in the United Kingdom?—Yes.

1074. And if you take gonorrhœa alone in the Indian returns, there has been a great fall from 173.6 to 34.0 per 1,000; but this disease stands higher now in India than it does in the United Kingdom?—Yes.

1075. Then the fall of all diseases in India is from 1517.1 in 1890 to 547.9 per 1,000, and the admissions due to venereal disease have fallen from 30.45 to 10.1 as compared with a percentage of 16.3 for the army in the United Kingdom?—That is all in accordance with the general reduction of sickness which has been going on.

1076. May we deduce from those figures that as regards venereal diseases as a whole the army in India has decreased even more than the army at home?—Yes, because there are not so many temptations.

1077. But if you take all diseases of the army in India we get a fall of from 1517.1 per 1,000 in 1890 to 547.9 in 1912. Those figures compare with 740.9 and 346.4 for the army at home. May they be taken to show a considerably greater advance in the general health of the Indian army than the home army? Of course, the Indian army is not so healthy; but judging by those figures is not the improvement in the general health of the Indian army greater?—Yes, there are more diseases to get an improvement from in India. I mean to say a reduction in enteric fever, dysentery, cholera, and all those diseases which, in previous years, have always shown a large number of sick. I think it was last year that the number of cases of enteric was less than the deaths alone 11 years ago.

1078. That is accounted for really by the very great improvement in the treatment of other special diseases?—It is not so much treatment; it is prevention of disease.

1079. In the sick returns, the constantly sick from all diseases in India now stand at 28.86 per thousand as compared with 19.50 at home. I suppose that is not at all surprising considering the climatic and other conditions of India?—No.

1080. Taking the percentage of venereal disease cases which caused constant sickness in India, we find 24.4 in India as against 28.3 at home. That also seems to indicate less prevalence of venereal disease in the army in India than that at home?—Yes, I think so.

1081. Then we turn to invalids in India. It is very curious that the invalids per 1,000 in India and in the United Kingdom are returned at exactly the same, that is, .20, but the percentage of invalids due to venereal disease is higher by 3.3 to 2.2 in India than in the United Kingdom. Does that indicate that venereal diseases are somewhat more severe in their character in India?—You do occasionally get a very severe type of disease, more especially in connection with malaria grafted on to syphilis, possibly with a amount of alcoholism thrown in.

1082. Do you think there is any reason to believe that these diseases may take a worse form in a tropical climate?—I think there are grounds for assuming that to a certain extent, but how far it is hard to estimate.

1083. From both the Indian army and the home army a certain number of men are invalided every year. Would those men generally be in an infective state and be able to infect when they left the army?—Very possibly so, but if those men wanted to continue the mercurial treatment, they had only to apply or to tell the medical officer at Netley that they wished to continue this, and it would always be arranged that

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they could attend at the nearest military hospital to continue the treatment; but it must be clearly understood that under the Army Act if a man has finished his time with the colours we have no legal powers to detain him in the hospital.

1084. When a man passed from the colours to the reserve with venereal disease as the cause of his invaliding, he could have free treatment still if he wished to have it?—A soldier invalided for venereal disease would not be passed to the reserve, he would be invalided out of the army. If he is discharged from the colours to the reserve whilst undergoing treatment for syphilis and he chooses to apply for it. That has always been allowed with regard to the mercurial treatment; but we have no power to compel a man to do so or to attend for treatment; it must be at his own expense so far as railway fares go. The Government do not bear any travelling expenses; but if he is going to settle in a place where there is a military hospital, it can be arranged for him if he asks that it should be done, and I think I may say the same thing is about to be done with salvarsan.

1085. You do not know how many men avail themselves of this opportunity?—No, I am afraid I cannot give you any idea.

1086. I see you do not return any deaths as the naval authorities do. Do any deaths occur from these diseases?—Yes, I am afraid they do occasionally, but not very often. I am afraid I had not time to get them out for you.

1087. I suppose there would not be many?—No, they would be very small in numbers in recent years.

1088. Do you keep completely separate returns for the army in the colonial stations?—In the report on the health of the army, the colonial stations have all been grouped. South Africa is alone; but all the other colonial stations have been grouped together until this year. We made a change this year, and the abstracts at the end of the book will show all the diseases in each command by diseases, not by groups of diseases as they have been shown in previous years.

1089. Can we be furnished with the returns for the Colonial Stations army to complete the army statistics?—Yes, if you will give me time for them to be made out. It will take three weeks.

1090. You may take as much time as you like, but I think we must have them?—It means they have to go through all the annual returns for each command. There is no return in the Blue Book which will give it, and it will take some time and mean a good deal of work to get it out; but it can be done.

1091. I gather you are strongly of opinion that increasing temperance is a powerful cause operating towards the diminution of these diseases?—Yes, increasing temperance, more common sense in the men generally, better conduct and a better type of men—who are under better influence when they get to their regiments now. The young soldier is better looked after at the dépôt. Here is a table out of this year's Report on the Health of the Army, which gives the incidence of venereal diseases by commands at home.

1092. You also attach very great importance to the more healthy conditions in barracks, and to the greater amusements and healthy recreation that is provided?—Yes, the more healthy conditions in barracks, and not only that, but the way the men are better looked after in their institutions and canteens. They not only have a canteen where they drink beer; but they have a coffee-shop where, if a man does not want to drink he can get a cup of coffee, or tea, or minerals with his supper. He need not go to the canteen. There would not be any alcoholic drinks about there. He can get an excellent supper also for a very small sum, especially in India. It is surprising what a man can get for supper at a well managed regimental institute in India for the price he pays.

1093. Have you yourself served in India?—I have served 10 years there.

1094. Do you understand the working of the Cantonment Acts in India?—They were in force when I was out there from 1890 to 1895, and were more or less talked about.

1095. Do you think they have had anything to do with the large fall of venereal disease in India?—Perhaps you might have other opinions about that; but my own personal opinion was that I do not think it was very much, because the powers, such as they were, were so very limited.

1096. I suppose we can get evidence on that point from some of the officers who have recently been in India?—There are no C.D. acts in force there now.

1097. No; but it is the operation of them that we may have to consider?—The last time I was out in India I was sanitary officer, and the incidence of venereal disease was considered in each particular station; before that the only thing that was done was, if a woman was known to be diseased she was ordered out of cantonments. There was a hospital and she was offered treatment; but if she would not stay there she was escorted out, and it simply meant she went into the native city.

1098. Do you think the exclusion from cantonments has had any effect?—My own private opinion is, very small; but I would not give that as a departmental opinion.

1099. We have been told that the forms syphilis takes are on the whole milder in recent years; is that your opinion?—Yes, I think it is.

1100. Is there any distinct difference between the course of the disease in a tropical climate and at home?—No, I would not like to say as much as that, except that at home one does not, as a rule, come across the malarial combination which makes a syphilitic affection very much worse in some cases, especially if it is neglected. One does not see the alarming types of cases that used to be seen at home either. I think that is because the men come more readily under continuous treatment.

1101. When a soldier is discovered to be infected, I suppose he goes straight to the doctor, and he is ordered to go to the hospital?—Yes, if he is found to be infected; but I think you may take it, now, when a man is infected he does do that.

1102. Are all your hospitals now able to apply Wassermann, or any other test?—At all the headquarters hospitals of commands; and from out stations, the smaller hospitals, in which the necessary equipment is not on charge, and there is not a specialist medical officer in charge of venereal diseases, the blood is sent to headquarters for examination.

1103. Can all your hospitals give salvarsan treatment?—Not all, but in each command there is one or more hospitals where it is given.

1104. There is a hospital in every command that can give it?—Yes, at home.

1105. And would men be passed on to that hospital for treatment?—Yes.

1106. Do your army surgeons receive any special instruction for dealing with these diseases?—Yes. The captains of the senior course undergo a course at the R.A.M.C. College.

1107. A special course?—A special course on venereal diseases.

1108. In addition to that, I suppose afterwards they get a great deal of experience in the hospitals?—If they pass that, then they go out as specialists on venereal diseases, and they are posted to a hospital at the headquarters of commands. Of course, that has only been done within the last year or so.

1109. (*Sir Malcolm Morris.*) Two years ago?—Yes, I thought so. I think I am right in saying we now have a sufficient number of officers who have specialised in venereal diseases for all home commands and most colonial commands. The medical officers who go out to India are sent to the Central Research Institute at Kasauli, and they go through a course there.

1110. (*Chairman.*) But a great many of your officers do specialise on the subject?—Yes.

1111. What number?—I cannot say. That is not my branch. That is personnel.

1112. You have given me some figures now, which I have not seen before, of the admissions to hospital in different commands in the United Kingdom. I see the London district stands appallingly above any other

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command. Is that your general experience?—It has always been so.

1113. Do you think these other figures for the two years 1911–12 that you have given us, are any indication of the relative prevalence of these diseases among the civil population in these places?—I do not know enough to answer that question. That is for local men. I doubt whether there is any considerable decrease of disease. What reduction there is may be due to other causes.

1114. Have you come across any considerable number of cases of innocent infection?—That is to say, innocent in the sense of having it on the fingers, hands, and lips?

1115. Yes?—I do not know that I can recall any myself amongst the men. Some of my own brother officers I know have been unfortunately infected in that way when operating.

1116. Do the company officers take trouble to explain to the men the grave evils of these diseases?—The company officer is responsible for teaching the men sanitation and preventive medicine.

1117. And is that done regularly in all units of the army?—Yes, there is an army order issued about it, and it is done.

1118. Do your officers of the Royal Army Medical Corps lecture the men in any large gatherings?—This has been done in certain stations during winter training lectures and addresses are given on preventive medicine to the officers of each station.

1119. And they are supposed to pass it on?—They pass it on. The manual of sanitation is their textbook.

1120. But the medical officers do not lecture to the rank and file?—They do lecture to the rank and file as occasion may require.

1121. So that every year every man in the army gets some warning with regard to these diseases?—Yes, he should do.

1122. Are the arrangements carried out?—Yes, they are. The only thing is, if a lecture is given on a certain day, a certain number of men must be on guard, or other duty. But the number of men absent is small.

1123. Are there any suggestions which your experience has led you to consider as to any means of controlling venereal disease in the army?—No, I do not think so; except to reiterate and impress on the regimental officers themselves that it is their business to influence the men for good. Lectures and addresses are one thing, but personal influence is another; although the men are lectured and addressed, and as the result of that we flatter ourselves there are reductions in figures, and the effect is good, yet in some commands, for instance the North China command, although they lecture the men *ad nauseam*, Hong Kong being an international port and rife with disease, the venereal statistics do not show much reduction. In that case apparently the lectures do not achieve their effect. There can be a great amount of personal influence, and in some regiments that influence is very much stronger than in others.

1124. Which shows that in those particular regiments more is done?—Yes. Some regiments take a very strong line with regard to prevention of disease and sanitation, and it receives very great attention. They have an extraordinarily small number of admissions for disease.

1125. Wherever these small numbers occur they show, do they not, that analogous figures might be obtained in other units, if the same amount of influence was brought to bear?—It is rather hard to say. For instance, there was one unit last year in a certain command abroad that had an admission to hospital rate of only 189 per 1,000. I think it will be a long time before the British army will get down to that low rate.

1126. May I take it as your general opinion that more might be done in the way of bringing the influence of the medical officers to bear on the men to restrain themselves?—A; a rule, medical officers, in my opinion, do all they can to inculcate continence.

1127. (Sir Kenelm Digby.) You spoke of an army order just now. Does that contain any special instruction with regard to venereal disease? Is there any special rule?—It is on sanitation and preventive medicine generally.

1128. Are venereal diseases treated exactly on the same lines as any other disease—cholera, or anything else?—Yes.

1129. Is there anything of this kind. Is there any order in the army making it the duty of the man, if he has symptoms of infection, to resort to a medical man at once?—There are two or three inferences with regard to that. First of all, if a man goes too long without reporting sick, when he does do so he may be “crimed” for concealment of disease.

1130. I asked the question as to whether there was any order to the effect that it was the duty of the soldier to go to the medical officer as soon as he was aware of having syphilitic disease?—The regulations lay down that if a man is sick he must report sick; it is general.

1131. There is no special reference to venereal disease?—No, I do not think so. But in many instances the men of his own company would compel him to do so.

1132. I only wanted to get the fact whether there was or was not. I say, speaking only of venereal diseases now, is it in the army orders in any way made the duty of the man to report himself to the medical officer if he shows symptoms of a certain disease?—Yes; I think it is in regulations.

1133. And it would be a breach of discipline if he did not do so?—Yes; otherwise, how could you “crime” a man for concealment?

1134. Still, as I understand, that is only in a general form; and there is no special provision of that kind with regard to venereal diseases?—I do not know that I can give the absolute chapter and verse for that; but it is for local administration, and the companies are as interested themselves in keeping down and reducing their sickness as the commanding officer of the regiment himself is.

1135. (Sir Malcolm Morris.) With regard to the question of secondary syphilis and the various manifestations that occur under it, do you keep statistics of the various forms of symptoms that occur? Is it broken up?—No.

1136. No matter what it is, it is all included in this heading under syphilis?—Yes; with the exception of cases like G.P.I. and locomotor ataxy.

1137. Would it be possible for us to get a return of, say, the cutaneous cases, the number of cases of iritis, and the number of cases of other organs in the body that are affected, and perhaps, later on, the number of cases that are affected in the nervous system?—Yes, possibly in time.

1138. It would be a difficult job, but it is possible?—We should have to send out to every hospital for that.

1139. We have great difficulty in civil life in being able to trace the exact number of different forms which syphilis takes in a certain number of the community, and you have the opportunity in the army. Would it be possible for us to get those returns without any undue difficulty?—Yes, I think it would, but it would take time. It would mean a reference to every command and every hospital.

1140. Can you say offhand which are the symptoms which usually develop first. Is it true that among them cutaneous things are the earliest, as a rule?—I should say so from my own personal experience; but I have been more engaged in sanitation and in office work for a good many years now.

1141. Would they know the number of men who become blind from syphilis, for example, and are compelled to leave the service on account of blindness?—Any man who is compelled to leave the service for blindness would be invalided as a case of syphilis, if it was due to syphilis.

1142. Therefore, to be invalided for syphilis we should not know what particular form of eye trouble it was that caused the invaliding?—Yes.

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1143. It would be possible?—It would be possible by going round to all the hospitals. What I mean to infer by that is, that the War Office have not the information and the commands have not the information.

1144. The drop in the amount of syphilis has been extraordinarily satisfactory, not only from treatment, but also from other causes that you have stated?—Yes.

1145. Can you give us any suggestion, or have you thought whether there is any plan whereby we might do the same in civil life?—Yes. I would not say I have been able to go into that very much; but you see the men come into our hospitals and they are treated in a general hospital. There is no stigma about it; that he is put off into the venereal hospital, or anything of that kind.

1146. Have you any suggestion to make as to how the stigma might be removed in civil life and how people might be induced to come for treatment early?—I do not know that I have. Civil life is not my job.

1147. Some men in your service have made suggestions?—Yes, I believe they have.

1148. And some of them have been very sensible?—I must explain that I come here more especially with regard to statistics.

1149. Yes, but I thought perhaps you might have thought of the question on account of the reduction?—No; but I think I would suggest that being the line, that there should be no stigma if a man reported sick to the hospital for that kind of thing.

1150. (*Mr. Lane.*) You say the number of re-admissions into hospital is diminishing and the diminution is due to improved treatment, and that treatment dates back to this report from the Advisory Board?—After that there were important changes made. Continuous treatment was ordered then.

1151. By mercury?—By mercury. It was left to the medical officers to carry it out.

1152. And since that time, more recently the patients have been submitted to more modern treatment by salvarsan?—Since that has come in.

1153. Does every patient have facilities for getting salvarsan?—Yes, now.

1154. So that any man in the army who contracts syphilis can get two or more salvarsan injections given him?—Yes; it is complete in all commands in the United Kingdom, and I believe it is also complete now for the colonies as well. I may mention that India makes its own regulations with regard to salvarsan.

1155. So that if a soldier gets syphilis, he must have salvarsan?—He should have it, certainly.

1156. Then we have had some figures as to the number of recruits rejected for venereal disease as reflecting on the prevalence of the disease in the community. Would you conversely say that the prevalence of disease in the army would be reflected on public life; that is to say, if syphilis diminishes in the army it would diminish in the community at large?—No, I do not know that I would.

1157. Are these lectures to the soldiers compulsory?—Compulsory in the sense that they have to be given or that the men have to attend?

1158. Yes?—Yes, it is published in orders.

1159. And when a soldier is infected with syphilis, is he given very explicit instructions as to the danger of the disease?—Yes.

1160. And as to the possibility of conveying it to his comrades?—That is for the medical officer to do. If a man has active syphilis about his mouth, for instance, we would not allow him in the barrack room. He is taken out. In the same way, on board a troopship, when he is coming home from abroad and is not bad enough to be in hospital, he is put in a special mess close to the hospital.

1161. In London and elsewhere in the station hospitals, you say there is no segregation of these men; they mix up with the other sick men in wards?—They are in their own wards; they have venereal wards.

1162. They are venereal?—Yes, venereal, but not venereal hospitals, with one exception. Of course, Rochester Row Hospital is only used for venereal

patients and treatment by salvarsan, &c., and its scientific work.

1163. If a man reports for any form of venereal disease, is there any punishment or any docking of his pay?—He pays full hospital stoppages, and loses his proficiency pay.

1164. And that amounts to a considerable sum to the soldier?—4*d.* per day proficiency.

1165. We have had the opinion expressed here that the withholding of sick pay from venereals is the most unsuitable punishment imaginable?—Yes, the withholding of sick pay; but that was in the old days when they used to deprive a man entirely of his pay.

1166. But he feels the deprivation in his pocket now?—Yes, he feels it in his pocket; but if a man is unfit by reason of syphilis, why should he be drawing his proficiency pay? He gets his ordinary pay beyond that. This is not docked, but out of that he has to pay hospital stoppages, as do all other soldiers when in hospital.

1167. Is there any punishment for concealment of disease?—No, there is no stereotyped punishment; it depends entirely what view the commanding officer takes of it.

1168. But the concealment of gonorrhœa would be easy in many cases. A man might very easily have gonorrhœa and go about his duties and get treatment elsewhere?—Yes.

1169. So that the figures for gonorrhœa may not be altogether reliable; there may be more gonorrhœa in the army than appears from these figures?—No, I am not prepared to admit that. I would not vouch that those figures are absolutely accurate, but I do maintain they are reasonably accurate, or that there is not any considerable amount of concealment.

1170. You agree there is a relation between temperance and the amount of disease. Would you say there is a relation between temperance and the severity of the disease?—On occasions, yes.

1171. Soldiers invalided for primary or secondary syphilis would include tertiary, would they?—Yes, we never showed tertiary.

1172. Very few of these cases invalided then would be in a contagious condition. They would probably be mostly tertiary and so not contagious for the most part?—Yes, possibly that view might be taken. They would be late secondaries, anyhow.

1173. They would be very late secondaries, but very severe ones for a patient to be invalided from the army. So that most of these cases, we may take it, are tertiary and are therefore in a much less contagious condition than secondary ones?—Yes.

1174. Would you say that syphilis in India is a more grave disease than it is in this country?—It is occasionally.

1175. The cases I occasionally see invalided at home are those of an extremely severe type?—You see the worst of them.

1176. Usually occurring in young boys?—Yes.

1177. (*Mrs. Scharlieb.*) Are there any special instructions given to the men to enable them to recognise their condition, such as this which is given at Guy's Hospital (*showing pamphlet to the witness*)?—I believe there are.

1178. Do you think they are useful?—They are undoubtedly useful; and I believe—in fact I know—in places they have pamphlets of that kind, especially with regard to gonorrhœa, warning men about not using other men's towels, &c.

1179. (*Dr. Mott.*) Is it the practice in the army to administer salvarsan immediately the diagnosis of syphilis is made?—I believe that is the practice. That has all been worked up during the last couple of years at Rochester Row. As soon as treponema is demonstrated, the man is put under it.

1180. Of course you would not have any doubt at all about the Hunterian chancre, but in cases where there was a sore and it was doubtful, the treponema would be sought for?—The treponema is sought for at once, and, if not found, I think I am right in saying salvarsan would not be administered until secondaries appear, or they would probably make two or three

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attempts to obtain it. But upon that point Colonel Gibbard and Major Harrison can speak.

1181. Sir Malcolm Morris put a question about the invalided patients, and some mention was made of general paralysis, tabes and locomotor ataxy; but, as a rule, those cases take place about 10 years after infection, after the men have left the army?—Yes, quite so. We only get them in the case of old soldiers who have been kept on. I have prepared here a table, which I think I ought to have given you before. It was not ready to send to you (*handing a table to the Chairman*).

1182. In my practice as a physician at a general hospital, I have found soldiers invalided from the army sent to me suffering from paraplegia or from brain syphilis within two years of infection; in fact, the chances of their suffering from that disease diminish with each year, and the worst cases occur in the first four years. So that I think a number of cases which are invalided out of the army might be cases of syphilis of the nervous system, and it would be very valuable to have some statistics relating to that. I had a case the other day in hospital, and they would certainly be recorded in your hospitals. They are serious diseases from which they very seldom recover?—I quite agree with you.

1183. I mean to say, cutaneous diseases are not of so much importance; but this is a very important matter of economy to the State, because they are incapacitated for life usually?—Of course, according to our rules of statistics, if the medical officer considers it is due to syphilis, it should be put to syphilis, in accordance with the nomenclature of the College of Physicians.

1184. As a matter of fact, if I get a case of that sort in a young man, I generally anticipate the chances are about equal that it is due to syphilis, and especially if the man has been in the army?—Do not be too hard on the army.

1185. I will give you my reason. You have admitted a healthy man into the army, have you not?—No; we have admitted a man who is not showing active signs of syphilis.

1186. But you have admitted a man who is presumably not suffering from a disease that one calls a nervous disease?—Yes, presumably so.

1187. I do not mean he is not thoroughly treated. I should think he is more likely to be thoroughly treated in the army than a civilian, offhand?—He has had to attend every week for constant treatment.

1188. There are some statistics obtained from abroad, where they are able to do this, and it is estimated that about 4 or 5 per cent. of the people infected with syphilis suffer from these nervous affections. I thought possibly we could get some information of what happened before the salvarsan treatment was introduced; because it seems to me to show a probability, by giving salvarsan quite early in the disease, of many of these severe nervous diseases being avoided?—I cannot give you offhand the exact figures, but our invaliding for nervous diseases is high; the large majority of them are epilepsy, and, of course, mental diseases. We divide them into mentals and nervous cases. The mentals are all cases of insanity, and of the other nervous diseases a large number of them are epileptics. That is one thing the recruiting medical officer can do nothing to satisfy himself about. A man is always asked whether he suffers from fits or not; but if he says no, you have nothing to prove it, unless he throws a fit in front of you.

1189. Of course not, and he might not for some years?—He might not for some years.

1190. (*Canon Horsley*.) The last witness we had before us occupied a parallel position to yours in the navy, and according to the two sets of statistics, the navy is unfortunately worse from the point of view of immorality and disease than the army. You would like to consider that, naturally?—I am sorry to hear it.

1191. We were told by him that 10 per cent. of the men in the navy were suffering from these

diseases. Your figures do not show anything of that sort?—No, I would not like to say as much as that.

1192. That is what he admitted. You would not admit that for the army?—With the exception of certain stations, we have not got all these ports which are the places only the navy gets to, and places abroad like Hong Kong and Gibraltar, where foreign fleets meet.

1193. Would not that be partly due to the fact of the prohibition of marriage in the navy, whereas you allow it in the army?—We allow a certain amount of marriage in the army.

1194. Is there any obvious or conclusive reason why it should, not be allowed in the navy?—I do not answer for the navy.

1195. You probably know that in the navy there is much more frequent inspection of the men. Apparently they are inspected every time they join a ship, and they are constantly moving from one ship to another?—Our men are inspected on transfer to other stations, too. The medical officer in charge of the unit in most commands, instead of the old formal inspection with the trousers doubled up to the knees, open shirts and bare arms, sees the whole of the regiment or practically the whole of it, and makes an inspection of the hygienic condition of every man of the unit once a month when he does a thorough examination.

1196. That would tend to a more speedy and sure detection of the disease than in the navy?—That is why I say I do not believe there is any large amount of concealment of disease.

1197. You spoke about a mobilisation inspection, which was quite new to me. Could that be asked for or demanded by some external authority?—Not by an external authority, but by the G.O.C. himself.

1198. Not by an external authority, say, the Council at Dover?—Certainly not.

1199. In that inspection every man is inspected?—He is, and inspection held as if the unit was going on service.

1200. And they are all inspected from the point of view of venereal disease?—No, not only venereal disease, but heart, lungs and other things, with an inspection of the medical history sheets to see what the man has suffered from.

1201. Does that apply to the officers as well as to the men?—Yes, the officers are examined in a mobilisation inspection.

1202. Then with regard to stopping pay in hospital, which is a little check on vice possibly, do I understand that men in hospital lose money by being there?—Yes.

1203. Would one man who is there with a broken leg through stopping a runaway horse, and another who is suffering from syphilis have equal stoppages?—No; because the man with the broken leg if done on duty would probably get the whole of the hospital stoppages remitted; or if he is in hospital with a disease like enteric from abroad or anything of that kind, he gets half the hospital stoppages remitted.

1204. And if he had brought it on entirely by his own vice, he would have full stoppages?—Yes; and not only that, but if it is an injury due to his own act, for instance, like attempted suicide, or anything of that kind, he loses all his pay.

1205. Would venereal disease come under the category of attempted suicide?—No.

1206. Maximum stoppage?—No, certainly not.

1207. Why not?—Because he would still get his ordinary pay. He would have hospital stoppages to pay out of that, and he would lose his proficiency pay.

1208. But he would be in no worse case than a man who had got disease without any vice?—Yes, he would, because the man who got disease without any vice would not be stopped his proficiency pay.

1209. That is what I want to see. There is some pecuniary penal consequence from their getting disease through their immorality?—Yes.

1210. Dr. Scott Lidgett, who was obliged to go, asked me to ask you with regard to the army order about lectures, is it a printed document that we could have? I think you said there is an army order

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saying a lecture should be given on these points periodically?—Yes, there is an army order. Of course if it has got into the regulations, it stands now as a regulation, and that is only a general regulation directing that these lectures should be given. But you must understand each command is left to work its own salvation with regard to the way in which those lectures are given. What I wish to say is, the authorities at the War Office cannot take upon themselves to arrange all details for commands. That is the rule. When an army order or regulation is drawn up at the War Office, you cannot enter too much into detail. The general idea and principle is given out from the War Office, and it is left for the command to act up to, and they work out the details themselves.

1211. But if the order is that there shall be a lecture once a year on this subject, is there no detail about that?—There are details in the lecture.

1212. I do not follow you at all. However, it is the case, as in the navy, that at least once a year Tommy Atkins will hear a lecture?—Yes, and I am quite sure you can say more than once a year.

1213. That is all the better. I think you would agree that the less consumption of alcohol, and the diminished prevalence of drunkenness, have increased the defensive reaction of the tissues as well as rendered people less liable to infection?—I do not know. Would you say that again?

1214. The less consumption of alcohol which you alluded to, and the diminished prevalence of drunkenness?—I mean more in the way of abstemiousness.

1215. But abstemiousness includes teetotalism, I suppose?—Yes, but temperance does not necessarily include teetotalism.

1216. If you find an enormous proportion of the Indian army do abstain from alcohol altogether, that would decrease the prevalence of diseases, and would increase the defensive reaction of the tissues?—I am not prepared to answer that last question. I think you must seek authority from others on that.

1217. You referred to the use of mercury. That is still common, is it not?—Yes, it is still used in conjunction with salvarsan.

1218. I am alluding to what informs the lay mind very much, that is a book on syphilis. A doctor there says that mercury never cured a case of syphilis. Do you agree with that?—I do not.

(*Chairman.*) I do not think that is quite in the line of this witness. We shall have specialist evidence.

1219. (*Canon Horsley.*) The only other question is this. The commanding officer has great influence, and also the company officers. Is there much done by the chaplain speaking, not about the physical effects, but the sin?—I cannot answer for the chaplain.

1220. You do not know whether there is any order to them about it or any habit of theirs?—I am sure there are general instructions of the chaplains themselves.

1221. On this point?—Yes. From their general idea of life they would try to work on the men's feelings in that way.

1222. But is there any necessity that there should be a lecture from that point of view given occasionally, and left entirely to them?—By the chaplains?

1223. Yes?—You must ask the Chaplain General.

1224. (*Sir John Collie.*) I want to know if in your opinion the new syphilis register on which all the soldiers who are kept under medical observation after the first symptoms of cure, has an effect in definitely diminishing the amount of secondary and tertiary syphilis?—I think it has.

1225. I gather that recent advances in the administration of the Army Department have placed it in a position of more definite control of these diseases by the syphilis register?—Owing to the better administration.

1226. Since the introduction of the syphilis register, I take it you have the diseases under much better control?—Yes, under more control, and under much better supervision. There is no question now of a man disappearing for a month, and that kind of thing. If he goes away from his station, or if, for instance, a man is

coming home from India and he is on the syphilis register, the roll goes down to the medical officer on board the troopship, and when he gathers all those rolls together, he knows he has to see so many men who have been undergoing syphilis treatment once a week, so that the treatment can be continued on board ship afterwards. In the same way the syphilis case sheet is sent on to whatever station the man goes to.

1227. There may be some here who do not quite understand what the syphilis register is. Would you mind in a few words giving us a short account of what it is?—The syphilis register is a book which is kept in every hospital, and in addition to that each man has his syphilis case sheet, which is kept in a portfolio. Both those are entered up every week when the man comes up. The register is retained in the hospital, but the case sheet goes with the man's documents, and it is for the information of the medical officer at the next station that he goes to.

1228. So that the next medical officer knows that he has syphilis, and sees that he carries on the treatment?—He sees all the treatment he has had up to date.

1229. (*Mrs. Burgwin.*) I think I understood you to say that all our army men are treated in the general hospitals?—Yes. I was going to say the general hospital is the only hospital we have; but we do have infectious hospitals in different stations, but those are for infectious diseases such as scarlet fever, diphtheria, and those things. There is a venereal ward.

1230. In the ordinary hospital?—In the ordinary hospital, and that has certain annexes for the better treatment of that class of case.

1231. It removes a certain amount of stigma not being specialised?—Of course there still remains the stigma of being in the venereal ward.

1232. I am trying to see how we should adapt your rules to civil life. From what you said, I gathered you would not suggest it would be better to have a hospital for these diseases, and for that purpose, unless there is less stigma attaching to the people who attended, even though they may be suffering from those diseases.

1233. London, I understood, had the highest number of infected persons. Might that be the result of statistics, or might it be the result of treatment being more easily given in London than perhaps in the other big towns?—In the London District?

1234. Yes.—May I have the rest of your question?

1235. Does it mean that possibly there are more facilities for treatment, and therefore you get a fuller return than you would in other towns?—No; I am afraid there are other causes for that.

1236. You do think it is really highest in London?—Undoubtedly. We have known that for years. But even now London is falling compared to what it was five years ago.

1237. You get a better type of boy coming up for the army than you did; he is a better instructed boy?—Yes, we hope he is, and I think he is generally too. Still, at the same time the same type of boy who enlists into another regiment and goes to a place like Aldershot, taking a given number of recruits raised, 500 coming to London, and 500 going to Aldershot, the fact remains that the men going to London will have a larger amount of venereal disease.

1238. I suppose we could not get the return as to the number of recruits that come from towns, and the number that come from villages? You say so many that come up as recruits are diseased?—Yes.

1239. I wondered if you could get a comparison between the town boy and country boy that presents himself?—Possibly they might be able to give certain information about that; but I would not place too much reliance on it, first of all, because with regard to the country boy, if he wants to enlist it is generally because he wants to get away from home for reasons, and he goes to the nearest town, or very probably not the nearest town but some way off, and his people do not see him until he has got his red coat on. In that way very often, the country boy would be enlisted in a town, and would be considered as a town boy. I mean to say, if you got those statistics they

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would be open to a great deal of fallacy; in fact, last year I did get some out on that point for someone, but we came to the conclusion that there was not very much reliability in them.

1240. (*Dr. Newsholme.*) I was very much interested in your figures with regard to recruiting. You quoted the fact that syphilis had declined from '63 in 1890 to '14 in 1912 among the recruits?—Yes.

1241. And you suggested that possibly a proportion of that decline was owing to the fact that recruiting sergeants are now able to recognise syphilis, whereas formerly they could not do so, or would put back only recruits with active symptoms of syphilis?—Yes.

1242. Would not that apply quite as much in 1890 as in 1912?—No.

1243. Will you explain that? I do not understand that?—Because in the recruiting market there is first of all the bringer or recruiter, who is a retired non-commissioned officer and who is paid as a pensioner, or a regiment may detach some of its own sergeants, as they do. Nowadays before he is allowed to go out recruiting, he is thoroughly trained by the medical examiner. As a matter of fact what he generally does is to keep the register in the medical officer's room. He is generally employed as a clerk, and keeps the register there, or sees men brought in and examined. He very soon learns what the medical officer wants, what he will not take, and what he looks at as suspicious. I would not say he is there at all the examination, when the man is stripped, because he is not. They are not allowed to strip them. But, as the result of the medical officer talking to him or addressing him, he gets impressed on him certain doubtful points which he is told to look out for. When he brings a recruit up, the primary inspection—not the primary medical inspection—takes place down in the receiving room, where the recruit is weighed, put under a height standard, and measured over his clothes and his vision roughly tested. He looks at his teeth and physique generally, asks him if he is ruptured, or anything of that kind. If he fails in any of those things badly, or any one or two of them, he tells him it is no good taking him before the doctor.

1244. Was there any change in the method of payment of the recruiting sergeant between 1890 and 1912? Is he paid *per capita* for recruits, or a salary?—I believe there has been a change in that too.

1245. That would explain a good deal possibly?—I rather think now instead of the absolute grant per head, the money is divided up between the recruiters at the station. However, that is a question for the recruiting staff.

1246. So that, on the whole, you do not think the figures of the comparison between 1890 and 1912 give one any clue as to the amount of syphilis in the average population, or would you not disregard it altogether?—I personally would not consider that a sufficiently reliable indication.

1247. Do you attach any importance to it whatever, or do you regard the figures as not to be trusted in that connection?—I think they probably have some truth in them, but how much I am not prepared to say.

1248. The next point I would like to ask you about is the question of the relative value of the admission rates of venereal diseases and the constantly sick rates of the United Kingdom. So far as the admission rate is concerned, is it correct to say that the improved methods of treatment may have permitted of hospital treatment in many cases to be dispensed with in the army?—Yes, I think that is fair, because a man comes up and gets the first admission now, and is put on the syphilis register, and unless he has a relapse he does not go into hospital again. Therefore it is that continuous treatment which enables him to go on without any further admission to hospital.

1249. And the fact that the treatment is continuous instead of intermittent makes the decline appear better than it possibly otherwise would do?—I should qualify that by saying that what we call continuous treatment is not a dose of perchloride of mercury every day, but an intramuscular injection of some form of mercury every week, or salvarsan at stated intervals.

1250. What I mean is, he does not count as more than one patient owing to your new system of dossiers?—Not unless he is a relapse. If he is a relapse he then has a second admission; but he does not appear in that table I gave you of "fresh" cases.

1251. I have that table here, but unfortunately that only applies to three years?—Because the table that was in use before that did not enable that to be checked, and I altered it.

1252. (*Chairman.*) Is it quite impossible that this table could be extended to cover a larger number of years?—You cannot get it.

1253. (*Dr. Newsholme.*) So that we may take it it is likely that in the earlier years, say the 90's, some of the cases would come twice over more frequently than in recent years?—Yes.

1254. Then if you turn to the table of constantly sick, I suppose the main difficulty there in comparing early years with recent years is that owing to improved methods of treatment, the duration of hospital treatment is much shorter than it used to be?—Yes.

1255. Therefore the ratio of constantly sick would thereby be lowered?—Yes, I think so; but that is a question for Rochester Row.

1256. But it is also a statistical question, I think?—Yes, it is.

1257. So that there is some doubt, is there not, as to which of these two ratios, the constantly sick or the admissions, is the more valuable of the two as indicating the progress of venereal diseases in time in the army. Which would you regard as the better index of the prevalence of venereal diseases in the army?—For the number of cases in the army I would take the total number of admissions, deducting a percentage for relapses.

1258. For the three years we have the last named, and where we have not got it, which would you choose, the constantly sick or the admissions? That is the point I want to have your opinion upon. It is difficult to say?—Yes, it is difficult, and of course it was unfortunate that it is only in recent years we have been able absolutely to say how many fresh infections we had every year.

1259. You were taken through a comparison of the year 1900, and the year 1910. If you refer to your tables you find that the total venereal admissions per 1,000 of strength were 95 the first year, and 65·5 in the last-named year, 1910, making a reduction, roughly, of 30 per cent.?—Yes.

1260. Then, a little below that, you find, per 1,000 of strength, the number of admissions from all forms of illness were 655·1 in 1900, and 346 in 1910?—Yes.

1261. Making a reduction, roughly, of 47 per cent. A little below that you give in the last column, the percentage of venereal to total sickness. That has gone up from 14·5 per cent. in 1900 to 18·9 per cent. in 1910, an increase, roughly, of 30 per cent.?—That is percentages.

1262. But from 14·5 to 18·9 in the percentage has been an increase instead of a decrease as in the other cases?—Yes.

1263. The point I am at is this: the last column shows a proportionate increase in diseases, whereas the other columns, taken separately, show a decrease. Is it not better to abandon that last column altogether? I submit it is a proportion between two variables and that is inadmissible statistically. I will make my point quite clear. The total number of venereal diseases of all kinds have declined 30 per cent. The ratio between venereal and total diseases shows an increase of 30 per cent., which is an inconsistent result, and must be dismissed from the table altogether?—You see 1900 is a bad year.

1264. I do not think we shall get quite such a remarkable result in other years?—It is much lower in 1900 than the year before.

1265. I only wish to suggest a point to you. It is a mere statistical point, that is, that the percentage of venereal to total illness is a misleading item in this table, and that possibly it ought to be omitted?—I agree with you, but I only got out that percentage because I understood this Commission desired to have it.

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[Continued.]

1266. Will you pass on to the table you have put in showing the gap between 1903 and 1904. If you look at the total syphilis in 1903 you will find 46·3 per 1,000 of strength, and in the next year, 1904, there is a sudden drop down, as shown in the curve also, to 34·8. I must confess it does look as though there had been something more than merely lumping primary and secondary syphilis together, and that the two sets of figures are not quite comparable with each other. The jump is too great in a particular year?—Yes, I agree with you.

1267. I thought at first that might possibly be explained by the fact that in 1904, in the navy at any rate, they had begun to separate soft chancre from the other venereal diseases. I do not know whether there was any similar transposition in the army statistics. I believe it is not mentioned. If you look at soft chancre for 1903, it is 16; if you look at 1904 it is 19. Then 16, then 13·8. That does not look as though there had been any change over so far as soft chancre is concerned, does it?—No, it does not.

1268. Therefore that does not seem to be the explanation, and it does look as though possibly some statistical change occurred in that gap between those two periods?—Yes, by changes then made, medical officers were given an extension of time—up to two months—for diagnosis, which became, therefore, considerably more accurate, and to that must, I consider, be largely attributed the marked fall between these two years.

1269. With regard to the different divisions of the army in the United Kingdom, you have already been asked one or two questions on that, and there appears to be no doubt there is more venereal disease amongst soldiers in the London District?—Yes, as compared with other commands.

1270. That is so; but what strikes me as equally wonderful is the fact that in the different divisions at home there are also most remarkable differences. Taking the year 1910, for instance, the Northern command had 73 per 1,000 of strength, but the Western command had only 44. The local circumstances in Aldershot are probably uniform for all these different commands?—No.

1271. That is the point I would like to elicit. What are the differences in local circumstances between the Western command and the Northern command?—The Western command is practically nothing but depôts; they have not any large station.

1272. Does that mean there are very few men, or what does it mean?—There are few men and they are all small stations. They are depôts where recruits are posted and they only go there for three months depôt training; whereas the Northern command has a large number of depôts, but it also has some large stations like Lichfield and York.

1273. We will take another example. The Southern command in 1909 had an incidence of 55 and the Northern command 81. Would a similar explanation apply there?—The Southern command, so far as numbers are concerned, very largely consists of Salisbury Plain, and they get a good deal of work to do, where they have not the facilities for contracting these diseases.

1274. I should be interested to know whether these differences indicate differences in the commanding officers, as to the care and trouble they take in impressing their men with their personal influence, or whether it is merely an accidental difference?—I do not think it would be fair to lay that down altogether to a want of influence of commanding officers. It is a difference of circumstances in those northern towns. For instance, I know the trouble used to be in one station (I am speaking of some 25 years ago) to get decent men back into barracks at night. There were women there who were only too ready to keep them.

1275. Speaking broadly, would you regard these figures relating to the different commands in the United Kingdom as forming any sort of index of venereal diseases among the civil population in those towns, or is it more a question of opportunities of infection, you think?—I am afraid I could not express any opinion about that.

1276. The facts are there, but you do not draw any inference from them?—No, I am afraid I could not.

1277. I quite agree. Similarly, generally you are not prepared, I gather, to draw any inference from the great reduction in the army and say that probably that may show a similar though not nearly so marked an influence on the civil population. Have you formed any opinion on that point?—There are recruiting figures there.

1278. Taking the recruiting figures and admission figures together, and remembering also the fact that the death-rate from syphilis in the Registrar-General's figures has also very greatly declined, if you put those three sets of facts together, would you then be in a better position for forming an opinion on the subject?—I do not wish to doubt the Registrar-General's figures.

1279. They are not worth so much as your figures?—There are difficulties about the registration of deaths from syphilis, as you know.

1280. Yes, we have heard about that already. But remembering that all three sets of curves run in the same direction, declining curves, would that influence your opinion on the subject?—The inference would be that there is less syphilis in the civil population certainly, probably because each generation as it goes on has got its taint. At least that is the interpretation I would put on it.

1281. Would you be inclined to think that such decline as has occurred is due to the fact that the population is getting immune a little bit? Is that what you mean?—I think it is a very dangerous thing to say I agree to that; but at the same time I do not see why that should not be, but I prefer not to hazard an opinion on it.

1282. There is one other point. In former reports of the Army Medical Department—I have the one for 1908 before me—a table, or what is called a plate, is given. It is a table on which there are scarcely any entries. This table shows a comparison between the number of admissions for venereal disease taking the different armies: In the United Kingdom, 68·4; in France in the same year, 28·6; in Germany, 19·3; Austria-Hungary, for 1907, 54·2; United States, 167·8, and Russia, 62·7. That was put in the official Army Medical Report for 1908, and I believe for two or three other years?—Yes.

1283. It has been dropped recently, and I suppose we may take it such comparisons are subject to possible fallacies?—Yes, I think that was the conclusion we came to.

1284. But is it likely, notwithstanding these fallacies, that these international figures do give some idea of the relative amount of venereal diseases in these different European and the American armies?—Presumably so.

1285. If that be so, then France and Germany have very much less than the United Kingdom, according to these figures?—Yes, according to those statistics.

(Chairman.) Would you like to ask any questions, Dr. Scott Lidgett?

1286. (Rev. J. Scott Lidgett.) Thank you. (To the witness.) Is there any model lecture on which the officers base lectures?—No, I do not think so.

1287. Each officer follows his own course?—Yes. Of course the venereal prophylaxis is merely merged in the prevention of disease, and there is a Manual of Sanitation for that which covers the ground.

1288. I understand you to attribute the improvement to the army in part to the increased care of the men?—Yes.

1289. I suppose that care includes moral instruction and influence as well as hygienic instruction?—I am afraid I do not know anything about the moral instruction. You must look to the chaplains for that.

1290. Still, in the case of these influences that are brought to bear in barracks and so on, they are largely supplied, are they not, by the chaplain and by the formation of temperance societies and recreations and so on?—Yes; but they have their institutes and their dry canteens independent of the chaplains.

1291. It is a fact, is it not, that Lord Haldane, when he was at the War Office, had a conference of

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[Continued.]

chaplains and others with a view to closer and more powerful influence in that way?—Yes, I believe he did, and the Reverend Dr. McKay in Edinburgh was engaged in this work, and I heard about that when I was there.

1292. Do you think that fewer men subject themselves to the risk of infection as the result of all this?—As the result of what?

1293. Of all these social and moral influences which Lord Haldane brought into being?—Those have only been going on for the last few years.

1294. But do you think they have had a marked effect on the decline of these figures owing to the more moral character of the men?—It is rather hard to answer this, because this decline has been going on gradually for some years, and those procedures that you are speaking of now, and which I do not know the full details of, only having heard of them from hearsay, as far as I know have only been going on for the last two or three or possibly three or four years.

1295. They have been more developed in the last two or three years. They have not entirely been initiated?—Of course, all chaplains look after their men.

1296. I understand that. I was trying to find out what in your opinion was the effect on these statistics of that increased care. You would not hazard an opinion upon that?—I would not like to hazard an opinion upon that special point. I have no doubt every little help of that kind comes in with the other circumstances.

1297. You were asked as to the analogy between the figures of the army and the case of the civilian population. Would you suggest, or, at any rate, would you agree, with the position that increased care and moral education of the civil community might be attended by similar results to those in the army in reducing the prevalence of disease?—Yes, I suppose one might draw that deduction; but at the same time you must remember this, that although you give more lectures and more addresses and more influences in that way in civil life, the younger people when they are growing up are not removed from their circumstances; whereas when we get a man he starts a new life. He comes under new influences and, instead of being a loafer at a street corner and that kind of thing, it is put to him that it is up to him to be more than that when he gets into barracks, and if he is worth his salt he is very soon more than that with the change of environment.

1298. And you put all those influences on his self-respect as having something to do with these apparently satisfactory results?—As far as I can judge, the self-respect of a soldier is greater than that of a man at the corner of the street.

1299. (Mr. Lane.) Might I ask if this is the syphilis sheet in use now in the Army (*handing sheet to the witness*)?—No, that is not the present one. The present one is much more extensive. It goes on week by week.

1300. (Sir Malcolm Morris.) That is the one for 1904?—I do not know whether that was the origin of the present one, but it probably has been developed on that.

1301. (Chairman.) I see the figures you have given us for fresh admissions during the last three years differ very largely from the figures of admissions in the original table as it stood. Do you think one might take it that a fairly fixed proportion would exist between fresh admissions and admissions as you return them?—I am afraid I did not quite understand that.

1302. I am looking at the fresh admissions as you have given them to us just now. I think the difference is very marked. Would the general proportion of those figures fairly hold over a series of years?—Possibly so, but without any great regard for accuracy. I think generally it would be fairly true, though in four years, there would probably be a larger proportion of "relapse" admissions.

1303. But you understand, do you not, that these fresh admission figures from our point of view are very much more valuable than the other figures?—We quite realise that.

1304. And the difference is very large if you take 1910. Your new figures give us 1,379 and your old figures give us 2,374. That is nearly 1,000 difference?—Quite so.

1305. It is very large. Those figures really throw a fresh aspect on the matter?—That is allowing pretty well each case of syphilis an average of one re-admission or something like that, is it not?

1306. You are quite sure it is impossible to carry those figures back to a further stage?—I am quite sure, because I tried it.

1307. Could you let us have returns for the various commands in the United Kingdom carried back further? There are one or two points of view from which that might be interesting?—Admissions for venereal diseases?

1308. Yes, per command. You have given us two years, I see. There would be no difficulty about that, would there?—I think I can do that.

1309. It appears to me it would be rather interesting to see whether the relative infectivities was constant, or whether it wobbled about much?—I am under the impression you will find it fairly constant, except that Aldershot has very much improved. That is what we say, that Aldershot used to be a pretty average place, but now, owing to the amount of work the men get to do and the facilities for healthy recreations, for which the Aldershot Command, I may say, is easily first, it has very much improved.

1310. May I take it from your evidence as a whole that you think the idea of disgrace attached to these diseases is more and more getting into the mind of the soldier? Perhaps you would not like to offer an opinion upon that?—Yes. I do not think he likes it; but I do not know how far I will go on the disgrace question.

1311. Do you think he is being taught?—He is certainly being taught.

1312. He is acquiring a sense of disgrace in a higher degree than used to be?—Yes, because the present decent soldier is not the individual of 20 years ago. He is a better fellow; he is more educated.

1313. With regard to Sir Malcolm Morris' question, we are circularising all the large civil hospitals in the country for a certain amount of information. If we send you a circular of that kind, would you be able to obtain for us the figures that we want from all your hospitals?—Of the admissions for venereal diseases?

(Sir Malcolm Morris.) The details of the various forms of the disease. It is broken up into the various forms so as to get the statistics and to see which way the disease is tending.

1314. (Chairman.) If we ask your hospitals to keep those forms going for us for six months, will they be able to do it?—Certainly. I am quite sure they will do it in that way. I think that would be the most reliable information, too, if it was sent out and carried on for a period.

1315. Then as regards the witnesses with respect to pathology and the treatment of these diseases, I suppose there would be no difficulty in our calling Colonel Gibbard and Major Harrison?—No; if you will send a notice to the Director-General that you wish them to appear.

1316. Have you any statistics whatever as regards women and children on the strength?—As to these diseases?

1317. Yes?—No.

1318. Are women and children attended by the R.A.M.C.?—Yes, they are attended and we have a certain number of families' hospitals and there is a return, but I do not think I have information on that point to give you.

1319. There probably is no disease of this kind among them, or it is not recorded?—Possibly so.

(Chairman.) We are very much obliged to you.

Adjourned to Monday next at 2.30 o'clock.

FIFTH DAY.

Monday, 24th November 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. JAMES CRAUFURD DUNLOP called and examined.

1320. (*Chairman*.) You are Superintendent of the Statistical Department in the office of the Registrar-General of Scotland?—Yes.

1321. How long have you held that office?—About 10 years.

1322. Do you work in touch with the Registrars-General for England, and Wales, and Ireland?—To a considerable extent. We use the same classification of disease. Our local divisions of the country are very different in Scotland from those of England, and, consequently, the reports are not absolutely comparable, but you may take it that they generally are.

1323. We may take it that they generally follow the same form as that used by the other parts of the United Kingdom?—Yes, and the same classification of disease.

1324. We may take your figures, therefore, as directly comparable with theirs?—Yes, I think so.

1325. You have given us some tabular statements showing the deaths certified as due to venereal disease and parasyphilitic diseases in Scotland from 1855 to 1911. Have you devoted any special study to the question of the fluctuation of these diseases?—Generally. I will not say that I have gone very fully into them, because there is comparatively little to be got out of them. It shows, and it is very evident, that the general fluctuations are slight, especially when I call your attention to the second column where I have adjusted the figures to bring them up to the present day population. That gives one a very fair comparison from the year 1855 up to date.

1326. Taking syphilis first, you give two columns showing the actually observed number in each year from 1855, and then you have a corrected number adjusted from the population of 1911?—That is so.

1327. That is to say, if the prevalence of syphilis was in direct proportion to the population, and if the population had remained constant at the larger figure, the number of deaths stated would have occurred?—Yes, that would have been somewhere round about it.

1328. Do you regard these corrected figures as providing a fair estimate of the prevalence of syphilis in the successive years?—I must qualify it by saying the prevalence of certified deaths from syphilis, deaths attributed to syphilis.

1329. From the statistical point of view you consider that these corrected figures of yours give us the relative incidence of disease?—They certainly do. Whether the earlier ones are distinctly comparable with the later ones is open to question on account of improved diagnosis and improved certification in recent years. Possibly there were some cases lost in the earlier years through want of proper certification.

1330. From your point of view generally, would not the most accurate idea of the relative prevalence of disease be obtained by giving for each year the number of deaths per 1,000,000 or per 100,000 of the actual population in that year?—You could do that, but,

after all, that would be no better figure than the figure I give here. The rate per 1,000,000, if you load it with its proper standard of variations, would really be insignificant. I was rather afraid to use rates, because they are small numbers to base rates on. I have not used the term at all in the construction of the table. I preferred to adjust the numbers so as to make them comparable. You can, if you like, read these as being rates per $4\frac{1}{2}$ millions. If you divide each figure by $4\frac{1}{2}$, it will give you the rates per million. The adjusted figures are practically the same thing as a rate, but I did not like to use the term rate, as being too dogmatic, in the table; I much prefer the milder expression.

1331. You consider your method of correcting the figures on the basis of the last census, as the best for comparative purposes?—I think it is quite as sound.

1332. Referring to your table, you registered 216 deaths from syphilis in 1911, that is the last year shown?—Yes.

1333. What was the population for Scotland, for that year?—In round figures $4\frac{1}{2}$ millions.

1334. Your adjusted column shows a rise from 126 in 1855 to large figures in the sixties, seventies, and eighties?—They do, undoubtedly.

1335. Then there seems to be a slight falling off, but there are considerable fluctuations?—Of course, one would expect to find fluctuations dealing with comparatively small numbers.

1336. I suppose these figures, like those for England and Wales, must be heavily discounted, for various reasons?—That is so.

1337. Will you please state the main sources of error?—The main sources of error that I can discover myself are two. One is what statistically we know as biased error, the deliberate action on the part of those certifying because they do not like to use the term syphilis in a certificate, and if they can avoid it they will. Take, for instance, deaths of premature children. A good many of them are syphilitic, and if a child happens to be syphilitic and prematurely born, and dies, the medical certifier naturally selects the milder term for use in the certificate, and puts down the death as due to premature birth, and not syphilis, and quite justifiably so. Among older people, after childhood, syphilis directly is a comparatively rare cause of death. It is an uncommon cause of death after you have passed the age of 10 or 15 years. How much biased error comes in there I have no conception whatever and no means of ascertaining. Of course I am talking about syphilis killing directly, and not one of the parasyphilitic diseases.

1338. There is no means of estimating the importance of that biased error?—None. Then the other error is what is called unbiased error dependent upon the difficulty of diagnosis. There is often very considerable difficulty in deciding whether a disease is or is not syphilitic. In the parasyphilitic diseases also, locomotor ataxy, and general paralysis of the insane,

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[Continued.]

diagnosis is sometimes very difficult, and it is quite sufficient for the purposes of death certificates, according to certain interpretations of it, to say that death is due to paralysis. Speaking as a statistical man, I do not like it; but it is quite another matter when looked at from the point of view of the general practitioner. They fulfil the requirements of the law by stating that it is death from paralysis, without naming the particular form of paralysis. It is very hard indeed to make any allowance for that; it is there. It is more or less a constant error which goes through the whole series of figures.

1339. Therefore we may take it that certificates of death from syphilis cannot be taken as any real test of the prevalence of the disease amongst the population?—Yes. The actual amount of death from syphilis is almost certainly considerably greater than is shown by these figures.

1340. I see the smallest number according to the adjusted figures in your table are deaths occurring in the early fifties. Have you any reason to suppose that there has been increased accuracy in the death certificates since those earlier years?—I am quite sure there has been, there was much more loose certification at that time—and it is improving.

1341. Then the earlier years must be regarded as being probably more inaccurate than the others?—Yes. It is quite possible that the rise which we get in the eighties is largely accounted for by better certification.

1342. Are you able to offer any suggestion as to the means of obtaining more accurate certification?—I think it will come with time. I have no practical suggestion to make.

1343. It will not come automatically, will it?—I think it will, or very nearly so. I can give a little personal experience here. Since I have been in the Register House in Edinburgh I have introduced a system of sending out inquiries, such as is now done at Somerset House, when the cause of death is not clearly and satisfactorily stated. I send out a very carefully worded letter to the certifier, and ask him for confidential information regarding the cause of the death. The result of sending out these inquiries has had a very marked effect. The general quality of the certificates has improved. Once a man gets one or two of these inquiry forms he thinks twice before he fills up another certificate.

1344. I suppose we must expect the reluctance to certify death from a syphilitic cause to remain?—Yes.

1345. But you think the diagnosis of other parasymphilitic diseases is likely to grow more accurate as years go on?—Yes, certainly.

1346. I see that up to 1901 you include gonorrhœa and stricture of the urethra in one column, and in the next year and onwards you deal with gonorrhœa only?—Yes.

1347. Will you give us the reason of that?—Because of the classification adopted at Somerset House.

1348. Do you think the change has improved from the point of view of statistics or not?—In many cases it has, but in one or two cases it has not improved. We have a new classification now which I think is an improvement and which is adopted internationally.

1349. In all the later years the number of deaths would have been larger if it had not been for that change?—Yes, quite. Of course gonorrhœal deaths are not very many in Scotland, about 30 or 40 a year in round numbers, and the majority of those, were deaths from stricture of the urethra. The actual number is from inquiry very few.

1350. Do you think a large number of deaths from stricture of the urethra ought really to be attributed to gonorrhœa?—Yes.

1351. I suppose you cannot fill in the figures for the 10 years that are missing?—I could not without enormous research.

1352. Have you any return in a separate column for stricture?—Not for these 10 years.

1353. You cannot give us the number of deaths which may be attributed to gonorrhœa, including those due to stricture, in those 10 years?—It would mean going through the registers and picking out the

deaths seriatim. That would mean handling about 12,000 registers, a tremendous task.

1354. Do you think we may take it that your returns of death from locomotor ataxy and general paralysis of the insane are substantially correct?—I think so, more especially in the later years. Since 1903 I have made it a point in the office of returning every death certificate given as general paralysis other than those coming from asylums to ascertain whether it was general paralysis of the insane or not. We assume it is so if the death occurs in an asylum, but in cases of death outside an asylum we return them for information.

1355. I take it there is no reluctance to return those diseases as causing death?—None at all.

1356. In the case of those diseases the statistical bias does not arise?—No, it is not important with them.

1357. Do most of these returns of death from locomotor ataxy and G.P.I. come to you from the infirmaries?—The G.P.I. deaths are mostly in asylums.

1358. Therefore the notification is sure to be trustworthy?—Yes.

1359. I suppose we may consider that those returns do provide some indication of the prevalence of syphilis among the population?—I think so, clearly.

1360. The deaths from G.P.I. seem to exceed considerably those attributed to syphilis?—Yes, they do, and of course one must remember the very different age distribution of them. G.P.I. is a disease and a cause of death in middle age, but syphilis is essentially a cause of death in childhood.

1361. The total figure for 1911 seems to be 554 deaths from the syphilitic diseases which you have tabled?—Yes.

1362. That is not a large number, I suppose?—No, a comparatively small number.

1363. But you consider that the real figure should be very much bigger?—It should be bigger. I might amplify that with an explanation regarding the inclusion of aneurysm. When I came to make up this return I was doubtful whether it would be right or not to include deaths from aneurysm. In my days, in practice aneurysm was looked upon as a parasymphilitic disease; but to satisfy myself I consulted a very distinguished pathologist on the matter, and he gave me his opinion that, although most deaths from aneurysm are due to syphilitic arteritis, one cannot be sure of that fact, that there is a proportion at all events which are not due to syphilis, and that it would be safer to leave it out from such a tabulation. I have the figures here, and if they are of any interest to the Commission, I will gladly put them in.

1364. You have the figures showing deaths from aneurysm in each year since 1855?—Yes.

1365. I think those figures would be of interest to us. If in a number of hospital cases of aneurysm, syphilitic origin was diagnosed in a certain proportion, would it be fair to apply that proportion to the figures you have given us, and say that that proportion of deaths was due to syphilitic causes?—Absolutely fair.

1366. Is there any other aneurysm which may be regarded as partially parasymphilitic?—No. One might say the same of anæmia, possibly some deaths from anæmia are syphilitic in origin, and cirrhosis of the liver; but there one is getting into the region of uncertainty.

1367. In your age periods table you work out 1,795 deaths from syphilis between 1901 and 1911 in children under one year?—Yes.

1368. That seems a very large proportion of the total. Where do those certificates of infant deaths come to you from?—Both private and institutional.

1369. In those cases that do not come from institutions, is there any bias against returning the infants' deaths from that cause?—Probably some, but probably less than in the case of adults.

1370. So that those deaths we may take as representing a very accurate statement?—Yes, in private one will have to add on some, but I think we get the majority of them. As I explained a few minutes ago, premature birth might be used as an alternative

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[Continued.]

term, and some might be lost there, and marasmus; but I think on the whole they are fairly complete.

1371. Do you keep a separate return for still-births?—No; We have no cognizance of them at all. A child must live before it is entered either in the birth register or the death register.

1372. Are those children largely infected?—That I cannot tell you.

1373. I suppose in those cases the infection is purely congenital?—Yes.

1374. Do you think that the high percentage of infantile mortality indicates a large presence of syphilis which might not otherwise be disclosed in your columns?—A good many syphilitic children die before birth. The number we do not know. I dare say it is a figure that could be ascertained, but we do not know it. Syphilis is a common cause of premature birth, of still-birth, and of abortion. How many such cases there are we do not know, and looking at the figures, more especially if you look at the table from which the deaths from syphilis are arranged according to the month of life, you will see that they form a series decreasing from children less than one month old onwards. The appearance from that is that it is the end of the series, the declining portion of the curve of deaths from syphilis with a maximum inside uterine life at probably seven or eight months. There may be a climax at the seventh or eighth month within the uterine life, and this is the tail end of it, probably the less severe cases.

1375. Besides these children who get into your tables, may there not be a large number of infected children whose health has suffered in various ways in after life, and whose death never gets certificated as being due to syphilitic causes?—Quite possibly.

1376. Are premature births recorded as the cause of death?—Yes.

1377. In that column I suppose a number of deaths ought to be treated as syphilitic in origin?—Yes, clearly. In 1911 there were 2,365 deaths certified as due to premature birth against 169 certified as due to syphilis. How many of those premature births were syphilitic I do not know.

1378. It is impossible to tell, I suppose?—Impossible to tell.

1379. Generally speaking, we may take it that the public health might suffer severely from venereal disease, quite apart from the results which your returns disclose?—Quite so. I am certainly of opinion that syphilis as a direct cause of death, as soon as you get to adult life, is very important; but it may, and probably does, affect the constitution and make people more subject to other diseases, and consequently to other forms of death.

1380. Apart from diseases which directly follow from syphilitic taint, I suppose syphilis may act as a predisposing cause in the case of many other diseases which would not be regarded as related to it?—Quite so.

1381.—Do your returns enable you to say whether syphilis is more prevalent in the large towns relatively in proportion to the population than in other parts of Scotland?—I have made a rough calculation. Our numbers are too small to give really satisfactory results when one loads them with the probable errors of sampling. We have a long series of figures relative to groups of districts in Scotland. Until recently—we do not do it now—we divided Scotland into groups, principal town district, large town district, small town district, mainland rural district, and insular rural district, to test the prevalence of syphilis, and I see the infantile deaths from syphilis in the principal towns are significantly more than they are in Scotland as a whole, but the figures of the other groups—large towns, small towns, mainland rural and insular rural—do not give the same results. We have a significant excess in the principal towns, but we cannot say whether it is an excess or otherwise in the other groups of district, as rates are not significant.

1382. Broadly speaking, the disease seems to be worse in the big cities of Scotland?—Yes, they have more than a share of it.

1383. You have not very many big cities, have you?—We have 16 with a population of 30,000 or more.

1384. From the point of view of infantile mortality, you think it is the larger towns where the disease is most prevalent?—Yes.

1385. And your figures clearly bring that out?—Yes.

1386. Do seaports show any special prevalence?—Our numbers are too small to go into that. By the time one loads the figures with probable errors their significance is gone.

1387. Is hospital accommodation in Scotland generally adequate?—I think one may say yes.

1388. Are hospitals in Scotland generally ready to treat venereal diseases?—Yes. There is an excellent lock hospital in Glasgow and a department in the Edinburgh Infirmary, and elsewhere.

1389. Do the general hospitals object to taking in patients suffering from these diseases?—These are general hospitals that I am talking about. The lock hospital in Glasgow takes them in, but in Edinburgh venereal diseases are treated in the Royal Infirmary.

1390. There is no tendency to forbid the entrance of patients suffering from venereal disease in Scotland?—No.

1391. What are the institutions analogous to the Poor Law unions and the infirmaries under the Poor Law in Scotland?—The Poorhouse hospitals.

1392. Are they governed by Poor Law institutions?—The Poor Law hospitals correspond to your workhouse infirmaries.

1393. Do those institutions take these cases in?—Yes, freely enough.

1394. Can they give the best treatment in those institutions?—I think so. I really do not know much about the practice inside. I have not had much chance of seeing.

1395. Are they able to apply the most complete tests?—Certainly in some Poor Law hospitals they can; they are as fully equipped as the general hospitals. I cannot answer for them all, though.

1396. Can you say whether people afflicted with these diseases go readily to these places for treatment?—I should not say a man would unless he were very ill. A man suffering from gonorrhœa or a mild form of syphilis, attends to his work. He is out every day; he is not going to collapse and go to hospital.

1397. I have had some figures worked out showing the number of deaths per million from syphilis, G.P.I., and locomotor ataxy, comparing Scotland and England. You have made this comparison yourself?—Yes.

1398. Is it anybody's business to make a comparison from the figures of all the registrars-general and give some idea of the relative standard of public health in different parts of the United Kingdom?—The English report summarises the figures to a considerable extent annually. They give the principal Scottish and Irish figures.

(Dr. Newsholme.) They do from other diseases, but syphilis is not amongst those diseases.

1399. (Chairman) Is it anybody's business to collate all the vital statistics from the different registrars?—I do not think so. Referring to a comparison between Scotland and England, I worked out these figures and I was very much struck with their similarity.

1400. They are wonderfully similar?—Deaths from syphilis in Scotland worked out at about 47 per million, and in England 46. Deaths from G.P.I. in Scotland worked out at 48, and in England 62. They evidently get a good deal more general paralysis of the insane in England than we have in Scotland. The deaths from locomotor ataxy are practically the same in the two countries, the Scottish figure being 15, and the English figure 16. Then deaths from aneurysm are very much the same, the Scottish figure being 34, the English figure 31. Then gonorrhœa and stricture, the Scottish figure I estimated to be 7. That is a speculative figure, and I have not the corresponding English figure.

1401. Do you think there is any significance in the fact that the figures of G.P.I. from Scotland are always lower than those of England?—No; I cannot interpret that.

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1402. All these figures you have said, or nearly all, come from asylums?—Yes, the majority of them come from asylums. Some of them come from poor houses, and some from private homes.

1403. There is no reason to suppose that any case of G.P.I. escapes notice in Scotland?—Except through non-recognition.

1404. There are some curious fluctuations in locomotor ataxy in Scotland. The figures in Scotland are generally lower than those in England and Wales, but in four of the eleven years they are very much higher, and the fluctuation in Scotland seems to be greater than in England. Have you any explanation of that?—Probably the mere statistical fact that the smaller the number the greater the fluctuation.

1405. Have you derived any general impression since you have held your office as to whether there is any increase or decrease of venereal diseases in Scotland?—I think all the figures show a decrease. The figures from 1880 onwards show a decrease, and that in spite of improved diagnosis, and in spite of better certification. That, I think, is a very satisfactory sign. I think we may still assume that there is a genuine decrease of syphilis in the country.

1406. You have given us some rather solid reasons for supposing that we must not trust these figures too much, and you have told us that there may be a good deal of disease about which does not come within your purview at all?—Yes, that is so.

1407. So that we must not comfort ourselves too much with the apparent decrease that these figures show?—The decrease is slight and steady in spite of better certification; or, to put it the other way, if there had been a rise, as in the earlier part of the column, I should have doubted it. But I think the decline is fairly good evidence at all events of a genuine decline of the disease throughout the country; and that, I think, agrees with the general opinion of the medical profession, that a less number of syphilis cases come to hospital—bad syphilis—now, than came a few years ago.

1408. Less bad syphilis. Would not that be consistent with a possible larger increase in milder forms?—Yes. The surgeons in infirmaries say that the syphilis is less severe, and they do not see so much of it now.

1409. Have you given any attention to the question of compulsory notification?—No, I have not. That is quite outside my province. As a medical man I should not like to see it. I am afraid it would tend to the masking of the disease.

1410. You are personally opposed to any form of compulsion?—Yes.

1411. You have told us that you do not see any way of securing better certification?—I do not think so. I know a certain section of the profession are rather anxious to get confidential reporting on the cause of death directly to the Registrar-General or to the Statistical Department, but, as a statistical officer, I should be very much afraid of it.

1412. Why would you be afraid of it?—I think we should not get all the reports.

1413. But you would get better and more accurate reports than you get now?—Yes, but we should lose in numbers. At present the death has to be entered in the register, and it is the local registrar's duty to see that the medical certificate is received. How are we in the Register House in Edinburgh to know that a death has occurred, and that we ought to be receiving a certificate? I am afraid there would be far too great loss of certificates to be a practical matter.

1414. Even if the tendency to hide the disease was not accentuated by notification, is the question of confidential notification a practical suggestion?—I would be afraid to trust it. I am afraid it would interfere too much with proper certificates. I am afraid that the "dust-bin" at the end of cause of death would be too big.

1415. Take the case of vital statistical records. In those cases would the surgeon fill up his form as he does now, but also send a confidential communication to the registrar to say that the cause of death was in his opinion due to syphilis?—I do not like the idea at

all; I think it is rather putting a premium upon telling lies in the register.

1416. You think it tends to dishonesty?—The first consideration is to get a true register; we want all our deaths registered. Medical statistics are quite a secondary matter in registration.

1417. I should have thought a confidential communication would rather have relieved the conscience of the medical officer?—They can use it now. It is open to them. I can mention the superintendent of one large infirmary, who keeps a supply of these forms, and whenever he has anything to correct after a post-mortem examination he writes it on one of these inquiry forms and sends it in.

1418. It is open to surgeons now to satisfy the feelings of the family, and yet to send you a correct return?—Yes, it is open to them, but I do not know that I should like to see it general and open to all.

1419. What I want to know is whether the more conscientious a man is the more he would like to be able, while not hurting the feelings of the survivors, to send you a report which he knew to be correct?—He is bound by law to put a return which he knows to be correct into the register, and I think it is incompatible with good registration to put a premium upon incorrect returns in the register.

1420. Have you any views on the question of compulsory detention with a view to curing cases of syphilis—people in prisons or in public institutions where they are looked after for nothing?—I have seen a little of it in France or elsewhere, but I am not ready to talk about it.

1421. You have no personal opinion to offer?—I have seen it carried out, but it is some few years ago now.

1422. (*Sir David Brynmor Jones.*) I want to ask one or two questions, but I am not sure that I ought to put them to you, Dr. Dunlop. Are you in a position to tell what diseases come under the head of venereal diseases in your opinion?—Syphilis, gonorrhœa, and chancre. I think those are what are generally looked upon as venereal diseases. Syphilis is not always a venereal disease, of course.

1423. That is rather embarrassing. I asked you the question what in your opinion were the venereal diseases, and you said syphilis, gonorrhœa, and chancre, and now you go on to add that syphilis is not always a venereal disease?—I do not think we are dealing here with a mathematically exact definition.

1424. That is why I said I did not know that I ought to ask you the question. Sooner or later we have to make a report, and I wanted to see if we were using terms in the same sense or not. I did not mean to catch you at all?—No, I quite understand.

1425. We were told the other day that locomotor ataxy was a disease which could be diagnosed, which is recognised as a cause of death. As I gathered from your answer, locomotor ataxy is never found except in the case of somebody who has had the disease called syphilis at some time or other?—I think that is an accepted opinion at the present day.

1426. What value is to be attributed to the word "accepted" in a proposition of that kind? Does it mean certainty, or probability, or an agreement among the practitioners of the medical art?—That is getting rather too clinical for what I have been working at for some years past, so I am afraid my opinion is not of very much good on the matter. I understand, for instance, that in the Royal Asylum at Morningside, one of the big asylums in the north, every case of general paralysis of the insane is found to give Wassermann's reaction, demonstrating the fact that it is syphilitic, and case after case being so tested proves that general paralysis of the insane is a syphilitic or parasymphilitic disease; and I understand—I cannot give you a direct authority for the statement—that the present-day view is that every case of locomotor ataxy is equally syphilitic.

1427. Would it be right to describe locomotor ataxy as a venereal disease in that case?—One must qualify that a little. "Venereal disease" is a loose and incomplete term.

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1428. Fortunately or unfortunately, I know not which, it is not for me to express an opinion, the Warrant of our Commission uses the term?—Yes. I think a Parisian authority puts down 25 per cent. of syphilis as being otherwise acquired, and only 75 per cent. as venereal. I think that was the figure, I am not sure, but some figure of that description.

1429. You say "acquired." There, again, I am not sure that I follow the full logical intent of the term?—75 per cent. of the syphilis is spread by illicit intercourse, but the other 25 per cent. according to this authority is acquired otherwise, that is in Paris. I do not think we have the same percentage in this country. I cannot define it; for instance, I have seen chancre on a tonsil, and I have heard of it on a surgeon's fingers. Two of my colleagues have had it as the result of performing surgical operations. I have seen such things. A certain amount of syphilis has nothing whatever to do with illicit sexual intercourse; but all the same, one cannot talk about venereal disease without very fully considering syphilis, because illicit intercourse is the mode syphilis in the majority of cases is acquired.

1430. Would you mind telling me what you mean by parasyphilitic?—The late symptoms of syphilis, the ordinary phases syphilis goes through—primary, secondary, and tertiary syphilis.

1431. Then locomotor ataxy is not parasyphilitic at all?—It is parasyphilitic; it occurs late, after the tertiaries are all past.

1432. I daresay we shall work it out. You quite follow my attitude. I am not questioning anything you are saying; I only want to try to arrive at some settled terminology with regard to these matters which, in the literature sent here and indeed in the evidence, is a little ambiguous so far. I may be wrong. Following that line of examination, what is the real meaning of this phrase—general paralysis of the insane?—General paralysis of the insane is a disease characterised by certain well-known definite symptoms. It is a pathological entity recognisable, and always ending fatally, generally fatal within two years.

1433. A pathological entity?—Yes, a recognisable, definite, well-defined disease.

1434. An entity, you say?—Yes. In pathology they describe it as a pathological entity.

1435. As it reads, does paralysis of the insane mean that before this disease is contracted the person is already insane?—No, you are taking the name of the disease too literally.

1436. You must not say that to me. I am asking you to define the term?—Insanity comes on perhaps before the other symptoms, or perhaps it follows the physical symptoms. The two of them develop synchronously. It is general paralysis of the insane or, to give it its full technical name, *dementia paralytica*.

1437. If you saw in a death certificate the cause of death general paralysis of the insane or G.P.I., does that mean that the patient was already in an asylum or found a lunatic by inquisition, or treated by some public authority under one of the Acts as an epileptic or idiot or something of that kind?—No, we get certificates of people dying in their own homes of G.P.I. I have known cases. Every lunatic does not require to be removed.

1438. May I take it that your statistics all mean that wherever general paralysis of the insane occurs, the words general paralysis of the insane refer to this disease which you say is a pathological entity and easily diagnosable?—Yes.

(*Sir David Brynmor Jones.*) Have you any theory of your own as to the real nature or cause of this disease called syphilis?

(*Chairman.*) Dr. Dunlop has come to give us statistics, not as a pathological expert.

(*Sir David Brynmor Jones.*) The witness is giving evidence, and I am only using the terms that he himself has used so far.

(*Chairman.*) These terms are terms in general use in the medical profession, and our expert colleagues on the Commission will, no doubt, be able to satisfy you.

(*Sir David Brynmor Jones.*) But I want them in evidence. Our medical colleagues on the Commission may have to go into the witness chair.

(*Chairman.*) We shall have one in the witness chair shortly. I think it is rather straining the statistical branch of the subject in which Dr. Dunlop is an expert; but I do not want to interrupt you.

(*Witness.*) I will answer any question you like to ask, but you must remember that I am not a pathologist and, therefore, you must take my answers for what they are worth.

(*Sir David Brynmor Jones.*) That was my intention, but as the Chairman has interposed I will ask you nothing further.

1439. (*Sir Kenelm E. Digby.*) With regard to your age periods table, columns 1 and 2, you say there is no difficulty about registration there, that they are returned as deaths due to syphilis?—Yes.

1440. The sentimental difficulty, if I may so call it, does not arise in that case?—Not so much. I might say there is a little dodging goes on there. Doctors use the term lues, the German name for it, instead of syphilis. I have seen it on many certificates.

1441. That is not so in cases of mature age?—Cases of mature age are comparatively few. I do not see so many of them.

1442. One is rather startled by the enormous number of these cases, and you say they must be added to and that we must take into consideration other diseases as showing signs of that disease?—Yes.

1443. Then, again, one is startled by the enormous gap between those under one year old and those between one and five—1,626 and 124 in the 10 years 1901–10. I suppose you have no figures at all dividing up that period between one year and five years. I suppose in each year they would decrease after one year old?—Yes. In the year 1910 there were only nine deaths from syphilis in children one year old. The number is altogether too small to handle.

1444. There is a great gap between that figure of 124 and the next figure, that is to say, between the ages of five and 10—only seven?—Yes, that is so.

1445. Is there any means of knowing whether these deaths in the first column, that is to say, deaths under one year old, are generally the first child or not?—I have no information on that point.

1446. There is no information as to whether subsequent children are liable to the same infection?—I have no information about it.

1447. With regard to what you were saying about confidential registration, I do not follow how you mean to work it out. Assume a death is returned as due to locomotor ataxy, would you suggest that, together with that return, there should also be sent in a confidential return to the Registrar-General giving the real ultimate cause of death, that is to say, a case where it would be absolutely true to say that death was due to locomotor ataxy?—Yes.

1448. I am taking, of course, a case where there is no question of bad faith or anything of that sort?—No, a complete return.

1449. What is important to know is whether it is due to syphilis; it is just as important for our purpose, at all events?—In the case of locomotor ataxy, I think you can accept it.

1450. You think syphilis can be accepted in a case of locomotor ataxy?—Yes.

1451. Take a case where there is a doubt, a case of aneurysm. In the case of aneurysm, would you have a medical man making a return accompanied by a confidential note saying that death was really due to syphilis?—I have grave doubts about the correctness of a confidential return in such a case. It is an extremely difficult and involved diagnosis between syphilitic aneurysm and the other, and many medical men cannot apply Wassermann's reaction; it requires technical skill and technical apparatus and so on.

1452. Still, there may be cases where the medical officer, making a return, returns it by some euphonism, and where, for our purposes and for the purposes of the public health, it is important to know that the real ultimate cause was syphilis. Would you send that as a separate confidential document, so that one would

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appear in the public report and the other would be reserved and kept in some way for statistical purposes?—I do not like the conception of it. As I said before, it is encouraging mis-statements in the register, which, after all, is the essential in registration.

1453. Would you prefer a method by a general name of that sort and for the Registrar-General then to send a form and ask if there was anything more to be said about the case?—Yes.

1454. That would be kept in a separate form?—That would be kept in a confidential form and would never go near the register.

1455. You would only have a confidential return made in answer to specific inquiry by the Registrar-General?—Yes.

1456. That is the method you would propose?—That is the method I would propose.

1457. You think that would be effective?—I think so. And, of course, one must remember that there are limitations in the value of death certificates. It is impossible to go into secondary and tertiary causes and work everything up to an infinitesimal point. There we should get far outside the region of probability and into the region of improbability.

1458. (*Sir Almeric FitzRoy.*) You say in your proof "The true amount of death from these causes is almost certainly considerably greater than shown by registration." Have you any means of estimating how much greater, or is that purely speculative?—That is a purely speculative opinion.

1459. In this table you have been kind enough to provide us with, you give the age in completed months of children under one year who died from syphilis in 1911. In the figures given, 46 and 40, have you any means of telling us the number of deaths due to premature birth?—Do you mean of syphilitic children prematurely born?

1460. Yes?—We do not know; the certificate does not say that.

1461. You have told us that the increase from 1855 to 1883 is largely statistical?—Yes, and certification. That again is a speculative opinion; but I believe it to be right.

1462. We are not to understand that the diminution since that date is due in any degree to laxer certification?—I do not think so.

1463. May I ask you what proportion of infantile mortality is due to syphilitic taint?—The registered deaths from syphilis among children of less than one year old, 169, constitute 1.2 per cent. of the total deaths among children of that age, and are equal to an infantile mortality rate of 1.4 per 1,000 registered births.

1464. Is stricture invariably due to the effects of gonorrhœa?—There are a few cases of traumatic stricture, but only a few.

1465. On the whole it is due to the effects of gonorrhœa?—It is a fair assumption when you hear of stricture to assume it is the effect of gonorrhœa.

(*Sir Malcolm Morris.*) I have no question.

1466. (*Mrs. Creighton.*) With regard to all these children under one year old—they must live, of course, before you would register them?—Yes, we do not register still-births.

1467. An hour's life is enough?—One minute is quite enough, so long as they breathe.

1468. I think I am correct in gathering from what you have said that you do not advocate notification, even compulsory confidential notification?—No.

1469. (*Mrs. Scharlieb.*) Are we to understand that this sudden increase of deaths from syphilis at the age of 15 or thereabouts means that the disease is then acquired and not congenital?—I think it is quite fair to assume that. There is an increase, but it is not a very great one. There is an increase at that age, and it is quite right to assume it is due to acquisition. Of course, you see, that over 15 takes in up to 20.

1470. I was astonished to see the great increase?—The figure does not indicate beginning at 15 years, these deaths may be at 18 or 19 years.

1471. (*Dr. Mott.*) You have said that syphilis is an unimportant cause of death except in the case of

parasyphilis, and you have shown it in your returns?—I think so.

1472. May not the returns of parasyphilis be due to this fact, that most of the cases die in asylums and institutions; and, therefore, you have a record of them?—I doubt it.

1473. All the paralytics or the great majority?—The majority are in asylums, some in poorhouses, and a certain number in private.

1474. But relatively few?—Yes, perhaps 30 or 40 per year.

1475. Again, in the case of locomotor ataxy, my experience in the infirmary is that a large number are incapacitated for a number of years, that they die in the infirmary and are certified as dying from locomotor ataxy?—Quite.

1476. So that probably you have a high figure for diseases of the nervous system of this type and a very low figure for those cases which occur during the secondary and tertiary periods?—I would not like to put too much weight upon the institutional certification of these diseases. Locomotor ataxy and G.P.I. are not in the public mind associated with syphilis; there is not the same repugnance to the use of the term. I think locomotor ataxy would be just as well to certify as syphilis.

1477. Is it not often the case that many of these cases of locomotor ataxy and G.P.I. do not die actually of locomotor ataxy or G.P.I. but from some intercurrent disease?—Yes.

1478. Therefore, a case of locomotor ataxy or G.P.I. might be certified as dying from bronch-pneumonia or cystitis, with secondary nephritis?—Yes. I think you get in a death certificate either locomotor ataxy put on as the primary cause of death and pneumonia as secondary, or pneumonia as primary and locomotor ataxy as secondary, and in such a case, in our office at all events, we would take locomotor ataxy as the cause of death.

1479. Diseases of the nervous system that arise from syphilis are pretty common, are they not?—Yes.

1480. They are not certified as syphilitic, but they are certified as dying from meningitis or tumour, or arteritis, and so on?—Yes, we occasionally get a number.

1481. Of death being due to tumour?—Yes.

1482. I should think in the case of cerebral tumour the cause was frequently syphilitic in adults. That is my experience?—I am sure I do not know.

1483. I do not want to doubt your figures at all, but I am trying to show that a great many cases of syphilis do not come before you at all?—Some of them are distinctly masked.

1484. Some cases might be certified as dying from paraplegia or kidney disease or symptoms of cerebral tumour, and so on, which would have their origin in syphilis. With regard to infantile mortality a considerable number of cases of abortion, premature birth, and still-birth are due to syphilis, are they not?—Yes, that is my general medical knowledge, rather than statistical.

1485. You will admit that. Do you keep a register of still-births?—No.

1486. Only of children dying of marasmus during the first year?—A child to be registered must live.

1487. Supposing you have a history of this kind: a woman has abortions or two or three miscarriages, and then a child born alive dying of marasmus, the next one dying of convulsions, and the next of meningitis, and then perhaps a live child will be born, and that child may live to 14 or 15 and then develop some form of syphilis. That is a common history, is it not, and such cases as those would not afterwards be registered as syphilitic meningitis or hydrocephalus?—Some of them, but the proportion is a matter of clinical and pathological study. You never get it out of the register.

1488. Are the children returned as dying of pemphigus recorded as syphilis?—

1489. You put them down without question?—Yes.

1490. (*Canon Horsley.*) Have you had any opportunity of comparing two towns in Scotland of equal

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population, one being a seaport, or garrison town, and the other not?—Our figures would not justify us in making any comparison.

1491. Take Inverness for example?—I am afraid the figures are too small. By the time you load the comparison with sampling error you are swamped.

1492. Do you think you would find more disease in a seaport or garrison town than another town of the same size?—Yes, I think that is common knowledge.

1493. Is the fall in birth-rate in any country generally conditioned by the presence of syphilis?—I do not think so.

1494. If a number of non-births are due to this cause, that reduces the birth-rate of the country?—There are so many means to account for the reduction in birth-rate, delay in marriage, preventive measures, and so on, that are known to be going on.

1495. I think you have already said that syphilis would be the cause of a good deal of non-births?—Yes, still-births, but whether that cause is increasing and causing a decline I do not know.

1496. The amount of non-births reduces the birth-rate of the country, does it not?—Yes, certainly.

1497. Then syphilis would reduce the birth-rate? Quite so.

1498. If you find the birth-rate of England decreasing, one cause to be fought against is venereal disease?—Yes.

1499. Illegitimate births in England are pretty steadily 43 per 1,000. What is the proportion in Scotland?—About 7 per cent of children born are illegitimate.

1500. Do you mean it is as high as 70 per 1,000?—Yes.

1501. In England it is only 43 per 1,000?—Yes, but we have a good many more in the north.

1502. Do you mean that there is that appalling difference between 43 and 70?—Some of the counties run up to as high as 12 per cent.

1503. With regard to compulsory notification of the accurate cause of death, would not a way out of the difficulty be by every doctor putting a number on his certificate? Every disease is numbered, and if he put down heart failure with a number against it, it would indicate what the cause of heart failure was?—I do not think we could trust the medical man to do it.

1504. Why not?—It would give them a lot of trouble.

1505. Would it not do away with the difficulty of sparing the feelings of the relatives?—Yes, but I would be afraid of it. Medical men are called upon now to sign death certificates for nothing. The Act sponges upon the medical profession for these death certificates and one dare not give them more trouble than one can possibly help.

1506. A girl in whom I was very much interested died from syphilitic meningitis in a Home of which I was chaplain. If she had been in a higher state of society the doctor would not have put down meningitis due to syphilis, but meningitis simply. Why should not he put down meningitis 37, or whatever the number was, which would convey the origin of it?—I do not think you can make it universal.

1507. Why is that?—The men who use it quite readily make use of it, but I do not think we can expect the local practitioner to be familiar with the code number used in the Register House.

1508. I think you said that you thought doctors had less reluctance to register syphilis as the cause of infantile mortality. I should have thought they would have rather more reluctance. In the case of an ordinary man like a soldier, if he dies of syphilis, the doctor puts it in; there is no particular consideration there for his mother or father; but to tell a mother that her baby has died from syphilis—"?"—The mother has had syphilis herself.

(Canon Horsley.) But still she would not like it. I should have thought it was quite the other way.

1509. (Rev. J. Scott Lidgett.) You are opposed to any proposal to make notification of the cause of death even confidential?—Yes.

1510. You rely upon the growing accuracy of registration?—Yes.

1511. Which is now improving satisfactorily?—Improving very well indeed.

1512. Will not that improvement, so far as the subjects we are dealing with are concerned, be seriously checked when the real cause of parasymphilitic diseases becomes generally known to the public?—Will it become generally known to the public?

1513. Are not the present medical discussions *coram publico*, and will not the fact that our inquiry will eventually become public property tend greatly to spread the knowledge that all these diseases are due to syphilis as their origin. Is it not desirable, in fact, that it should be better known?—I do not quite see what will be gained by it being better known.

1514. Is it not absolutely certain that that will be the case?—There is a certain prejudice against every disease amongst certain classes. Some doctors will not certify cancer.

1515. I presume the knowledge that many of these diseases are practically and almost universally due to syphilis is comparatively recent in the medical profession itself?—Yes.

1516. Then by the ordinary process of diffusion of knowledge it will become more or less public property before long?—Yes.

1517. Will there not then be a growing disinclination to hand to the relatives a certificate that death was due to general paralysis of the insane, or to locomotor ataxy?—It is possible, but it is taking a distant view, I think.

1518. Would not that seriously affect general improvement?—Yes.

1519. If it does seriously affect general improvement, to what extent do you think it would affect the certificates? What proportion would be under institutional treatment, so that perhaps a satisfactory registration might not be interfered with?—I have no figures, but the bulk of them are institutional.

1520. I suppose a good many cases of locomotor ataxy may occur in well-to-do families who do not go into institutions?—In Scotland we have about 83 a year, and I should say the most of them would be institutional.

1521. I suppose increased knowledge will have a tendency to prejudice certificates?—Quite so. There is a limit to the value of death certificates when we get into these complicated secondary causes of death.

1522. We heard just now that some deaths which are put down to one of the parasymphilitic diseases are accompanied by pneumonia. Might not you get a growing tendency, when the public comes to understand the matter, of certificates being given for pneumonia without anything more?—Yes. That is done far too much now.

1523. (Dr. Newsholme.) I want to ask you a few questions on the system of death certificates at the Registrar-General's office, and I would like to take a few examples. The other day a somnambulist, a young lady, walked out on to the roof of the house and fell to the ground, and died of a broken skull. What, in your opinion, ought to be the cause of death returned in such a case, somnambulism or a fractured skull?—Fractured skull, in that case.

1524. If you were particularly interested in the question of somnambulism, you would wish the primary cause of death to be returned to somnambulism?—Yes.

1525. But if you were collecting statistics from a national point of view, do you think fractured skull would be a more useful cause of death to enter?—I think so.

1526. Let me take another case. A drayman, a chronic alcoholic, soaked with beer, cuts his hand; erysipelas develops in the hand, and he dies from erysipelas. What certificate of death, in your opinion, ought to be returned in that case?—"Erysipelas, small wound on hand" I should like to see it.

1527. The actual final analysis in your return would be tabulated as erysipelas?—Yes.

1528. And you would leave it to the local statistician or medical officer of health to infer how the erysipelas originated?—Yes, if he would do that.

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[Continued.]

1529. From a national point of view you regard it as more important to know how many deaths occurred from erysipelas than to know how many draymen cut their hand?—Yes.

1530. It might be argued with you that it is much more important to know how many draymen are alcoholic, and that therefore alcoholism ought to be returned as the true cause of death. What do you say to that?—Did your drayman die from alcoholism? Is not that a matter of clinical research?

1531. There can be no doubt that in the case of this drayman alcoholism was the original cause of death, because, if he had not been alcoholic he would not have died from erysipelas from the cut in his hand?—He was drunk at the time, was he?

1532. Yes. That being so, might not death quite justifiably be entered as due to alcoholism? Excuse me asking you these simple illustrations?—They are not very simple; some of them are extremely difficult that you are putting to me.

1533. I will put one more. A factory worker is employed in manufacturing white lead. Notwithstanding all instructions given to him, he refuses to wear a respirator when he enters the chamber where the white lead is present in abundance. He dies of white lead poisoning. What do you recommend death should be returned as?—Lead poisoning.

1534. Not to wilful neglect of the man to take precautions?—No.

1535. I know a certain family, each member of which dies at about the age of 60 from apoplexy, and for several generations past every member of the family has, notwithstanding good habits of life, suffered from what I may call, for the want of a better name, tendency to premature arterial degeneration. I suppose you would recommend that the death certificate in those cases would be apoplexy and not this hereditary tendency to premature arterial degeneration?—Yes, apoplexy.

1536. That has an important bearing on the present inquiry, because, for instance, you just now recommended that the certificate of death should be general paralysis of the insane rather than syphilis, to which the general paralysis was originally due?—Yes.

1537. That you think, as a fact, the better process?—I do.

1538. As a matter of fact, you would only recommend the return of death as being due to syphilis when symptoms of this disease are obviously present?—No, I will not go that length. Every certificate of general paralysis of the insane implies syphilis, so by tabulating it as general paralysis of the insane you get the number of deaths from G.P.I. and you get earmarked syphilitic cases.

1539. You get the death from syphilis with, in addition, the exact way in which syphilis caused the death?—Yes.

1540. You know the "Manual of International Laws of the Cause of Death," written by Dr. Stevenson?—Yes.

1541. In this volume he sets out the reasons for the method of allotting the cause of death. I will read to you one sentence: "By primary cause of death is meant, in the case of death from disease, the disease present at the time of death which initiated the train of events leading thereto." You would agree with that, I take it?—Yes.

1542. Now, referring to Dr. Mott's case of a man with locomotor ataxy, his mode of death was pneumonia, but the cause of death present at the time was locomotor ataxy?—Yes.

1543. It would be improper for the medical practitioner in that case to certify death as due to pneumonia and not to locomotor ataxy?—It would be an incomplete certificate, it would be improper.

1544. It would be incomplete, and, therefore, not satisfactory?—That is so.

1545. It would lead to your tabulating the death under the wrong head?—It would.

1546. Imagine as a result of any representations from this Commission or otherwise, every medical practitioner were asked to put in the name syphilis when syphilis had been the origin of the train of events

finishing with death—originally syphilis, and then 20 years later general paralysis of the insane—if that were done would not it lead to less perfect certification of cause of death than at the present time?—I think it would.

1547. Or rather I ought to say less perfect allotment of deaths by you in the Registrar-General's office. In such a case as that, which would you allot them under—primary cause of death, syphilis; secondary cause of death, G.P.I.?—G.P.I.

1548. That would be your rule?—Yes, because we get the death put down to the proper disease, and it would also indicate syphilis.

1549. And you would leave an intelligent person looking at your reports to add together the G.P.I. and syphilis without any special differentiation as to the form of syphilis?—Quite so.

1550. Now I am not quite sure that in answering a question with regard to confidential certificates of the cause of death you were fully aware of the conditions of the question. I should like to ask you whether you know the system now in vogue under the National Insurance Act. The sickness certificate denoting the fact that the man is sick and unable to work, goes to the local insurance committee, the certificate as to the cause of inability to work goes up to London or to Edinburgh, as the case may be, to be centrally filed, and is dealt with as confidential. If such a system as that were applied to certification of deaths, do you see any objection—no cause of death going to the local registrar, but the cause of death in its entirety going to the central office?—How is the death register to be filled up?

1551. In the local registrar's office?—In Scotland we have duplicate registers. Every death that is registered in the registrar's office is entered in two books, duplicates, and signed by the informant, and there are certain statutory things which have to be put into the death register, one of which is the cause of death.

1552. Let us assume that that statutory obligation to put into the register the cause of death did not exist or was removed. Assuming that difficulty to be removed, is there any reason why a good system could not be built upon the basis of returning the fact of the death, apart from the cause of death, to the local registrar, and returning the cause of death to the central office?—It is a very unfortunate matter. Let us take this one thing alone. The registrar has to be satisfied that there is a reasonable cause of death put into the register, otherwise it is reported to the Procurator Fiscal for inquiry.

1553. That raises difficulties?—Considerable difficulties.

1554. He would not know what to send on to the coroner?—What is equivalent to the coroner? We have no coroner there.

1555. Can you think of any way in which that difficulty can be overcome? Would not a statement from the certifying practitioner, "I solemnly affirm that this death was due to natural causes," meet the difficulty?—That might meet the legal difficulty, because the local practitioner would know more about the cause of death than the registrar. He would be in a better position to judge whether it was natural causes or not. As I said before, my great fear is the shortage of these confidential reports. The doctors would not send them in.

1556. On the question of confidential reports, why should there be any shortage, and how could there be any shortage, when it is quite feasible to compare the local list of deaths without cause of death assigned, and the central list of deaths with cause of death assigned? They could be compared with comparative facility?—Some of our local lists we do not get till a few months have elapsed, and meanwhile the medical practitioner, who is a busy man, has forgotten all about the individual.

1557. There are certain punitive arrangements in the Registration Acts, are there not? A man who does not supply a certificate has failed to comply with a statutory obligation?—A medical man is bound to send in a certificate or ought to send in a certificate within 7 days, and, if not, he gets a notice warning him that

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[Continued.]

he has not done so, and calling upon him to supply one, and it is only after that that he is punishable.

1558. Do you regard these difficulties as insuperable?—They are very great.

1559. The difficulty would be very much lessened if this duplicated system were a general system and not confined merely to so-called venereal diseases?—I must confess I do not like it at all. Although I am the statistical man in the office, and very keen and interested in it, I must allow that medical statistics are only a secondary matter in registration. The getting of a complete and accurate register is the essential thing under the Registration Act.

1560. You were asked by Sir Kenelm Digby a question about deaths occurring in the first 12 months of extra-uterine life and you pointed out that those were a descending series, probably culminating in the maximum result of syphilis in infancy occurring about the seventh month of intra-uterine life?—The seventh or eighth month.

1561. That is confirmed by a well-known clinical circumstance, that women who have repeated miscarriages in the seventh month are almost certainly syphilitic?—Or would you not rather say the eighth month? There is an old popular notion that an eighth-month child does not live, while a seventh-month child will sometimes pull through, syphilis being the explanation of it.

1562. If you give those mothers a course of mercury or iodide of potassium they will subsequently bring forth living children?—Yes.

1563. Then you were asked whether you were able to specify in detail the deaths in each year of life, one year to five years. You could get those figures from your returns?—I could get them for 1911 with ease.

1564. I have got them for England and they confirm your hypothesis. In England and Wales the male deaths from 1901 to 1911 were 629, the next year 37, the next 8, the next 3, and the next 1—gradually decreasing. Those figures for England and Wales are given at page 198?—I have the 1910 report, page 156. Both sexes are put together and the numbers are as follows: aged 1-2, 7; 2-3, 4; 3-4, 0; and 4-5, 0.

1565. In regard to the return of deaths due to premature birth, there is no doubt, I suppose, that a considerable proportion of those are due to syphilis?—Yes.

1566. It is extremely difficult to say what proportion?—Hopeless.

1567. With the present amount of knowledge one could not give a definite opinion on that point?—No.

1568. You were asked also with regard to the notification of still-births. Do you not think it very desirable in view of these facts that there should be a system of compulsory notification of still-births?—I think that most desirable.

1569. Already it is partially done where the Notification of Births Act is in force?—Yes.

1570. Can you tell me whether it is in force in the whole of Scotland?—In all the principal towns, at all events.

1571. A certain amount of information may be available at the present time with regard to the number of still-births in Scotland?—Yes, but it is incomplete, and of course it does not come to the Registrar-General's department at all.

1572. You are aware that, quite apart from the Notification of Births Act, there is compulsory notification by midwives of all still-births on the 28th week attended by them?—Not in Scotland; there are no registered midwives.

1573. No, I beg your pardon, the Act does not apply to Scotland. You have no doubt that a system of registration of still-births would be a very excellent reform?—I think we would get useful information from it.

1574. Then you were asked as to the distribution of deaths from venereal diseases in Scotland, and you said the numbers were too small to found anything upon. Quite apart from that, have you in Scotland adopted a system of distribution of local deaths occurring outside the area where the deceased live,

as it has been adopted in England?—For non-residents, yes.

1575. That has been done?—Yes.

1576. The same corrections are made now in both Scottish and English reports?—Yes. What I referred to as significant was the mathematical application of the probable error of sampling.

1577. Can you tell me whether there has been a similar increase of hospital accommodation for diseases generally in Scotland to that which has occurred in England, or is it on a smaller scale?—That I cannot tell you.

1578. I suppose I can go as far as this, that there has been an increase in the proportion of total deaths from all causes which occur in institutions?—Yes. It is a subject I have not really paid much attention to.

1579. In England and Wales there has been a very remarkable increase. Such an increase in the proportion of institutional deaths in Scotland as has occurred in England and Wales would undoubtedly tend in the direction of improved certification of deaths, making it more accurate?—Yes and no.

1580. Tell me about the no. I know about the yes?—I can name from experience one or two general institutions where the death certificates are very bad.

1581. May I ask whether those are Poor Law institutions?—Yes, and in one case I discovered that there was a mere entering on the death certificate of the diagnosis at the time of admission to the Poor Law house, which very often are in general terms such as "debility." That was stopped. I can generally detect a change of resident doctor from the nature of the certificate.

1582. What proportion does the population of Glasgow bear to the whole population of Scotland?—Rather more than one-fifth.

1583. That is a very big slice of the whole. In Glasgow there has been an immense increase of institutional treatment of disease generally. You would not suggest that in Glasgow the certification of the cause of death has been imperfect in these institutions?—I do not want to indicate in any way where Poor House deaths are well and where badly certified.

1584. You have no doubt, as I gather, that the figures for syphilis and general paralysis, and so on, do on the whole show a decrease in the amount of syphilis prevalent in Scotland?—Yes.

1585. And that notwithstanding the fact that the rate for general paralysis and for locomotor ataxy has not declined?—No.

1586. It remains to be explained, therefore, if the mortality from these two diseases have not declined, why there has been a decline in syphilis. I suppose the increase of institutional treatment is probably one of the factors. More people go to asylums than before?—Yes, that is one—wider recognition.

1587. The second factor is one of writing to doctors who certify paralysis only and getting the more correct name, general paralysis of the insane?—Yes.

1588. (Chairman.) Could you tell us how the form which the certifying doctor has to fill up is worded?—"I certify that" so and so "died on" such and such a date; "I last saw him alive," under the date of the last visit; "The cause of death was as understated."

1589. It is not more closely defined than "died of"?—"The cause of death was as understated."

1590. I suppose your returns discriminate between males and females?—Yes.

1591. You have not so discriminated in the tables you have sent us?—As a matter of fact deaths from syphilis directly are fairly evenly distributed between the two sexes; general paralysis of the insane, about three males die of it to one female; of locomotor ataxy fully 80 per cent. are male, rather less than 20 per cent. are female; and just about the same figure with aneurysm.

1592. Is there anything you would like to say to us before you go that has not been brought out?—If you will look at the end of my précis I have given a short list of fairly well defined causes of death which enables one at a glance to place the importance of syphilis as a cause of death; all tuberculous diseases 8,887;

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[Continued.]

phthisis 5,451, cancer 4,948, accident 2,624, whooping-cough 2,347, measles 923, syphilis 552 (including aneurysm 713), scarlet fever 541, diabetes 445, rheumatism 419, appendicitis 410, enteric fever 272, suicide 253. There are 552 deaths registered annually from syphilis and parasymphilitic diseases, or 713 if you include aneurysm. That is a smaller number than the registered deaths from measles, but rather more than from scarlet fever; much smaller than the number of deaths from accident, but considerably more than

from enteric fever or suicide. That little list gives you at a glance the comparative importance of syphilis.

1593. Just one-tenth of phthisis?—Yes.

1594. And less than one-tenth of all tuberculous diseases?—Yes.

1595. The point you want to bring out is that, relative to other diseases, the diseases included in syphilis show a very small proportion?—A comparatively small proportion of the deaths of this country are due to syphilis.

Adjourned till 8th December 1913.

SIXTH DAY.

Monday, 1st December 1913.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.
Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Dr. BURNETT HAM called and examined.

1596. (Chairman.) You were head of the Health Department of Victoria, I understand?—Yes.

1597. Of the whole State of Victoria, or only of Melbourne?—Of the whole State.

1598. How long did you hold that office?—From about the end August of 1909 to the 1st of June of this year.

1599. What office do you hold now?—I am on leave just now; I hold no office.

1600. Do you return to your post shortly?—No; I have resigned that position.

1601. I believe you are thoroughly familiar with all that has been done recently in the State of Victoria in regard to venereal diseases?—Yes.

1602. What was the position in respect of those diseases prior to the Australasian Medical Congress in 1908?—Prior to that Congress a controversy existed respecting the extent of the ravages of syphilis. The specialists, the pathologists, the oculists and other medical authorities, contended that syphilis and gonorrhoea were responsible for a large number of the cases seen in hospital practice. Professor Allen, of the University of Melbourne, made two sets of post-mortem examinations of one hundred cases each, and he found, roughly, that about one-third of those cases (that is to say, 30 per cent. of them) showed signs, under post-mortem examination, either in the arteries or other organs, which he interpreted as meaning syphilis, though, in many of the bodies that he examined, he did not regard those signs as indicating that syphilis was the true cause of death. The oculists, Dr. J. W. Barrett chiefly, and others in Melbourne, also contended that syphilis existed in special cases without any clinical evidence other than certain choroidal degenerations, and they thought that these degenerations always meant syphilis, even when the other clinical evidence was not forthcoming. This position was challenged by other physicians and surgeons, who thought that these specialists, pathologists and others had overstated their case. But the specialists in children's diseases also supported the view taken by those who were called, by the other members of the

profession, the "Syphilophobes." That was the position of affairs prior to the Congress of 1908.

1603. Up to that time no particular attention had been paid to these diseases in the State?—Other than in addresses given to the Victorian Branch of the British Medical Association and articles following them in the local medical press.

1604. This Congress was really the starting point of the movement?—This Congress in 1908 was the starting point of it.

1605. Will you give us, very briefly, an idea of the proceedings at the Congress of 1908?—Papers were read by Professor Allen and other specialists, who supported their views by certain evidence. A long debate ensued, and that evidence was combated by other evidence of various physicians and surgeons. After the debate there was a resolution passed.

1606. You might give us that resolution?—The terms of the resolution are: "That syphilis is responsible for an enormous amount of damage to mankind, and that preventive and remedial measures directed against it are worthy of the utmost consideration."

1607. Was that resolution passed unanimously?—That was a resolution adopted by the full Congress after the debate.

1608. Were there any dissentients?—No; it was passed unanimously, I think.

1609. We may take it, then, to be the general consensus of medical opinion that that resolution represented the facts?—Yes.

1610. The next step, I understand, was a deputation to the Premier of Victoria?—The next step was a deputation to the Premier of Victoria. I may say that the resolution was forwarded to the Governments of the other states; but it is only of Victoria that I know.

1611. Following upon the deputation to the Premier, you were directed to draw up a scheme for investigating the subject?—That is so.

1612. Will you describe the outlines of that scheme?—I was the Commissioner of Public Health

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[Continued.]

for Queensland at that time. It was only in 1909, when this resolution was presented to the Premier of Victoria, that I took up my official duties in Victoria. It was about this time that this resolution was sent to me, and, as I had not attended the Congress of 1908, I had to read the papers and the facts supporting that resolution. Having read those papers and the facts submitted along with the resolution, I advised the Government to institute a comprehensive inquiry, in order to obtain further information—conclusive information—and to delay any proposed legislation at that stage.

1613. Your idea was simply that an investigation should be made to start with, to verify the facts?—Exactly so. From the outset I was of opinion that the data obtained should be as reliable as possible, and that any notification of cases should be accompanied by samples of the patients' blood to be subjected to the then novel test of the Wassermann reaction. In 1910 it was proposed to make syphilis a compulsorily notifiable disease in Melbourne.

1614. Was that the metropolitan area of Melbourne?—It was the metropolitan area of Melbourne.

1615. It was to be made notifiable without any fresh legislation?—Yes, it was made notifiable on the recommendation of the Board of Health through an Order of the Governor in Council under the Act of 1890. The Board of Health may make Orders under the Victorian Public Health Act of 1890. There was no new legislation.

1616. None of the measures which you took required any fresh legislation on the part of the Government of Victoria?—No.

1617. When you say "compulsorily notifiable," will you explain the way in which compulsion is applied?—The notification was a confidential one, or rather, I should say, impersonal. No names were to be given, but the sex, the age, condition of the patient, the district or locality in which he lived, the nature of the lesion, a short clinical history, and the duration of any anti-syphilitic treatment were required. It was also asked that a sample of the patient's blood should accompany the notification, to be tested by the Wassermann reaction.

1618. Is there any penalty attaching to neglect to notify venereal diseases?—There was the ordinary penalty that attaches to neglect to notify any notifiable disease.

1619. Was there a penalty ever enforced?—No, it was understood that the word "compulsory" meant it was a legal but confidential report. Had it not been made "compulsory" it could not have been enforced in the ordinary way that other infectious disease notifications are. Had it been merely a voluntary notification without the official Form used, the response might not have been very large.

1620. Then notification, I suppose, is applied to both sexes?—Yes, the notification applied to everybody.

1621. Can you give us any idea of the extent of notifications that were made under the compulsory order?—Yes. May I first give you an idea of what was asked for in the notification form?

1622. Certainly?—An advisory committee of the leading medical men and women in Melbourne was appointed to act with me to supervise this experiment, and we issued a circular to all medical practitioners, asking for the following information; that the following cases be reported: primary, secondary, tertiary, including gumma, ulcers, fibrosis, eruptions, bone diseases, eye diseases, &c., of certain or doubtful syphilitic origin; thoracic aneurism, aortic retroversion; apoplexy in young adults; locomotor ataxy; general paralysis of the insane, and cerebral syphilis; congenital and infantile syphilis; all cases in which a mother gives birth to a syphilitic child, has suffered from two abortions, or has lost three children from disease; under five years of age; and any other suspicious cases.

1623. And those cases will be the cases in which the notification had to be made?—Yes, those are the cases covered by the notification.

1624. When the case was notified, was the Wassermann applied at once?—Yes. In order to save time and in order that the pathologist conducting the Wassermann reaction at the university laboratory could identify the notification form with the particular sample accompanying it, the notification, together with the sample, was sent directly to him, and the Wassermann reaction was carried out as soon as the notification form arrived.

1625. Then in addition to making the notification, blood had to be sent to be tested?—Yes.

1626. And all the tests were made in the university laboratory?—Yes, and by one man.

1627. Now will you give us the number of persons who resorted to this notification?—Yes. During the 12 months there were 5,500 notifications, and an equal number of Wassermann tests.

1628. That means there were 5,500 cases reported, and all those cases were tested by the Wassermann reaction?—Yes.

1629. (*Sir David Brynmor Jones.*) Which year was this?—From the 1st June 1910 to the 31st May 1911.

1630. (*Chairman.*) Do all those cases represent cases which, but for this notification plan, would not have come to notice?—Yes. They cover a very wide range of cases, and I think many of these cases would not otherwise have been ordinarily suspected and, therefore, notified as syphilitic.

1631. But in any case this large amount of Wassermann testing would not have taken place but for this Government order of notification?—No.

1632. Then would you give us the results in the case of Dr. Barrett's clinique?—Could I give you the results of these 5,500?

1633. Yes?—Of the 5,500 samples submitted, there were 900 from the Melbourne Hospital, 1,100 from the Eye and Ear Hospital, and 3,500 from the medical practitioners. Of the 5,500, 1,900 gave a positive reaction and 400 a partial reaction.

1634. Is that regarded as a much higher percentage than you expected?—No, we expected higher, but we decided in the first place that we should only take the positive or partially positive reactions and ignore the negative reactions altogether. We added nothing to the negative reactions. I mean, whether there was clinical evidence of these negative cases or not, we did not count the negative reactions. We simply counted the positive reactions, and we broadly interpreted them to mean, 10 cases of syphilis to six positive Wassermans. That worked out about 5 per cent. of the total population, which was very much lower than we anticipated.

1635. In Dr. Barrett's hospital, I suppose every patient was tested by Wassermann?—Only between certain periods. At Dr. Barrett's clinique there were 550 cases examined altogether; on Mondays and Thursdays the eye cases, and at the clinics on Tuesdays and Fridays the ear and throat cases. All the cases that came up—some of them for mere trivial complaints such as specks of dust in the eye, and many of them to be tested for glasses—had their blood examined, irrespective of what disease they came for, and there were 550 practically consecutive cases examined.

1636. Out of those cases how many gave positive reactions?—Out of a total of 443 cases on the Mondays and Thursdays there were 35 positive reactions and 23 partial reactions, or a total of 13·2; and in the clinics on Tuesdays and Fridays there were 107 cases with 9 positives and 8 partials, a total of 15 per cent. So that of the 550 cases, 44, or 8 per cent., gave a positive, and 31, or 5·6 per cent., a partial reaction, a total of 13·6 per cent.

1637. That test, as far as it goes then, may be taken as decidedly an accurate one?—Quite so.

1638. As accurate a test as could have been made with that number of patients?—Yes; especially as there was no clinical evidence of syphilis in the majority of those cases.

1639. So that that 13·6 per cent. represents people who otherwise, if the test had not been applied, would have gone on thinking they had nothing of the sort?—Yes.

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[Continued.]

1640. Then there were post-mortem examinations carried out at the Children's Hospital. What results did they give?—The pathologist, Dr. Lambie, of the Children's Hospital, examined the tissues of the bodies of children who died at the hospital. The blood specimens of these cases were sent to Dr. Hiller to be independently examined; so that while Dr. Lambie conducted the histological examinations, the Wassermann test was independently applied by Dr. Hiller. Of 100 cases taken there were 54 positive, 17 partial, and 29 negative Wassermann reactions conducted by Dr. Hiller. Dr. Lambie found 54 positive histologically out of the 54 positive Wassermann reactions: 14 positive and 3 doubtful out of the 17 partial Wassermans and 14 positive, 5 doubtful and 10 negative histologically out of the 29 negative Wassermans. You will see the positives agree, but the negatives are somewhat smaller than were found by the Wassermann reaction.

(Chairman.) That seems to be a very high proportion.

1641. (Mrs. Creighton.) What age were the children?—They were of different ages.

1642. There was no special age?—A large number were under 12 months.

1643. (Sir Malcolm Morris.) What is the outside limit—up to what age?—I do not know.

1644. What is the limit in the Hospital for Children? what age do they take them up to?—Up to about 8 or 9.

1645. (Chairman.) The figures do not quite make up the 100. Where do the odd figures go to?—The 54, 17, and 29 make the 100 Wassermans. Of the 54 positive reactions, 54 were also positive histologically and 14 positive and 3 doubtful of the 17 partial Wassermans. There were also 14 positive, 5 doubtful and 10 negative found by the pathologist as against 29 negative Wassermans.

1646. (Sir David Brynmor Jones.) I thought you said 14 negative?—14 positive histologically, of the 29 negative Wassermann reactions.

1647. (Chairman.) These were all post-mortem cases, I take it?—Yes, this was a test by which we tried to confirm the Wassermann test by an independent examination conducted on post-mortem specimens—pathological specimens—at the Children's Hospital. The blood from these bodies, taken from the subclavian vein or from the heart, &c., was sent to Dr. Hiller for examination by the Wassermann test. We wanted to see how far the histological or the pathological evidence agreed with the Wassermann reaction.

1648. (Sir David Brynmor Jones.) The 14 and the 3 make up the 17 positive on the first test; is that right?—No; the 17 partial. The 14, 5 and 10 make the 29 negatives.

1649. (Chairman.) Perhaps you would put these figures in a simpler form and send them on to the secretary. What class did these children come from in this hospital?—They were drawn from all classes.

1650. Of what ages, generally?—Quite young infants, the majority, 44 out of the 54 giving positive Wassermans being under one year.

1651. The figures you have given us seem to show a very high incidence of disease among these children, do not they?—Yes. The positives absolutely agreed with the Wassermann reactions.

1652. Then comes the women's hospital. Were there any tests made of patients in the Women's Hospital?—No, there were no special tests made in the Women's Hospital. The staff of the Women's Hospital furnished the advisory committee with a statement with regard to gonorrhœa but not syphilis. We wanted to try and get some evidence of the more common form of venereal disease, and the honorary staff of the Women's Hospital furnished us with a statement to the effect, that half the operative work in the hospital was due to gonorrhœa; at least 50 per cent.

1653. Of the whole of the patients in the Women's Hospital?—Of the major operations performed.

1654. That seems a high proportion, does it not?—One of the leading members of the staff went so far as to say that he thought it was low, and he would put it at 75 per cent., but I think that is rather high.

1655. Is gonorrhœa more prevalent in Melbourne than syphilis?—I have never carried out any particular investigation with regard to gonorrhœa.

1656. Then it seems that there were no regular Wassermann tests made in all the hospitals?—Yes. Most of the hospitals sent specimens of blood from reported cases.

1657. But all the cases of the figures you have given us were experimental cases of patients at hospitals?—Yes, there were 900 reported from the Melbourne General Hospital, 1,100 from the Eye and Ear Hospital, and in addition, 3,500 were reported from private practice.

1658. Then as the result of this movement, the hospitals did begin at once to apply this test?—The hospitals sent blood to have the test applied. It was not applied at each separate hospital; it was carried out in one laboratory only, and by one man only, which I think is important.

1659. The hospitals sent the blood in all cases in which there was a suspicion of disease, and the blood was tested?—Yes.

1660. What conclusion did the advisory committee come to in their interim report?—Our first step was an educational one. We had then the results of the Wassermann reaction for one year, and we had also the evidence of the Children's Hospital and the Women's Hospital, and we thought we had sufficient evidence to ask the Government to do something. At that juncture we did not think any legislation should be brought in, but we presented this report to the Government, and the Government handed it to the Press. We were very anxious that the Press should publish our reports. We had some difficulty, because one understood this question had been long tabooed in newspaper writings, and that it was a very unpalatable subject. But the "Argus," one of Melbourne's leading dailies, did publish the report in detail together with a most excellent leading article. We got the "Argus" to call the disease syphilis, which no other paper did. The other papers published certain extracts from the report, but covered it by the name of the "Hidden Plague," or "A certain disease," or something like that. We endeavoured to get the Press to take up this question, because the wisdom of these investigations had been challenged in the Press by certain people. Our idea was to get these simple and concise facts known to the public through the Press, and I must say the Press supported us very well.

1661. At any rate you got the partial support of the Press. What further measures did you recommend to the Government?—We thought that there should be more information furnished to the Government than the mere statement of the facts of the investigation, so we next approached the Council of Women in Melbourne. It has a membership of something like 20,000 throughout the Commonwealth, so that it was a factor to be appealed to. They said they would co-operate with any reasonable measures the Government might bring in, provided there was no legislation of the Contagious Diseases Act character, or difference in treatment for women and men. The advisory committee never did consider that legislation on the lines of the now repealed English Contagious Diseases Act would be of any benefit. So we readily gave our assurance to the women that it would not be so, and they gave us their support. We did not suggest at that juncture that there should be any legislation.

1662. Did you ask that the compulsory notification should be maintained for a longer period?—No, not at that stage. The matter was coming up for debate at the Congress the next year, and we thought that we would wait until the Congress was over before we made any recommendations of a legislative character. Our principal consideration at that stage, after an educational campaign through the women and articles in the Press, was the necessity for institutional treatment, and we advised the Government to subsidise wards in the general hospitals to accommodate these cases.

1663. Previous to that, had there been wards in the general hospitals for the treatment?—No. As a

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matter of fact the hospital committees were rather adverse to taking in venereal cases. The cases seen as out-patients were not taken into the wards as a rule. But we thought if we could induce the committees of the general hospitals, rather than build special or lock hospitals, to set aside certain beds in the wards of the general hospitals, that would go a long way towards early treatment.

1664. Is there the same feeling in Melbourne against separate hospitals as there is in some other places?—I think so. I think there is a very strong feeling against any special or lock hospitals.

1665. You got the Government to subsidise wards?—We had first to approach and ask the hospital committees if they were agreeable, which in two cases they were, namely, the Alfred Hospital and the Women's Hospital. Then we asked the Government if they would subsidise those wards, and the Government did.

1666. In what form did they subsidise them—so much per bed?—So much per bed, or, in the case of the Alfred Hospital, a lump sum of so much per year.

1667. Is the treatment in these wards free treatment?—Yes, absolutely free. There were 24 beds set aside in the Alfred Hospital for male cases, and in the women's hospital 20 beds for female cases.

1668. That has all been carried out?—That has all been carried out.

1669. These new beds are now all available for these diseases, and are free?—Yes.

1670. In addition to that the Government is subsidising the use of the Wassermann test, is it not?—Yes, the Government was also asked to continue the application of the Wassermann test, and the Government agreed.

1671. Was that for a separate Government institution, or for a subsidising of the university for the carrying out of those cases?—It was in the form of a grant to the university for that particular purpose.

1672. Is that grant adequate for ordinary purposes?—I am afraid it was not in 1910, because we did not expect so large a number of cases as 5,500 to be investigated in the one year.

1673. Was there any public objection to this application of Government funds?—None whatever that I know of.

1674. It was accepted as right and proper?—It was accepted as right and proper.

1675. Was anything done with regard to medical education to fit the medical practitioners to deal with these diseases in the best possible way?—No; only that as time went on, and practitioners found that the examination revealed the presence of syphilis where in some cases it was least suspected, it encouraged other practitioners to send in notifications, and, wherever there was any doubt at all, there was no hesitation in sending the blood for examination.

1676. Does the Melbourne University give special instruction in the treatment and testing of these venereal diseases?—Not up to that time. There was a proposal that there should be a separate course of instruction instituted.

1677. I suppose that is very necessary, is it not?—It was. That was one of the recommendations of the advisory committee.

1678. Taking the experience you have gained through this certification period, did you come to the conclusion that there was a great deal of unsuspected venereal disease in Melbourne?—Yes.

1679. That was the general deduction that you made?—We came to the conclusion that the test had revealed a large number of cases of suspected syphilis which possibly would not have been revealed had it not been for the experiment carried out.

1680. I suppose outside the cases that were notified in this impersonal way, there must have been a large number of cases that were not notified?—Only about half the medical practitioners notified cases. I think there are between 350 and 400 practitioners in the metropolitan area, and only about 110 notified cases.

1681. But you are convinced that these experiments led to a greater interest in the subject, and may lead in the future to a still further improvement in the state of the diseases in Melbourne?—I think it led to

the institution of early treatment, and it also decidedly led to the institution of early and accurate diagnosis.

1682. It is early diagnosis followed by early treatment which is the most important thing to deal with then?—I regard it as the most important of all.

1683. Then we may take it now that the Government of Victoria alone—because other Governments, I suppose, have not taken the same action yet—defrays the whole of the cost of the carrying out of the Wassermann test as much as may be required by hospitals or by private practitioners?—Yes. There was some work done which may be worthy of mention in Sydney about that time, because at the 1908 Congress a committee was appointed, composed chiefly of practitioners in Sydney, to report on syphilis at the next congress. They reported to the congress in 1911 that there were 291 cases returned by medical men; 217 by the Sydney General Hospital, about 190 by the Royal Alfred Hospital, 11 by the Coast Hospital, and 10 by the Royal Hospital for Women, together with certain measures which they suggested might be carried out.

1684. Then the general position is that at the present time opinion is against legislation?—I cannot say that is the general opinion of all the States. The whole matter came up for discussion at the 1911 Congress, when certain resolutions were passed.

1685. You allude to the resolutions passed by the full Congress in 1911?—Yes.

1686. Did those resolutions go beyond the steps that were taken in Melbourne?—They implied certain legislative action which has been given effect to in one of the States already.

1687. The Commonwealth has not legislated at all?—No; the Commonwealth has no power to legislate on this matter—only the State Governments. The Commonwealth Government has no power to deal with State health matters at the present moment.

1688. I think you said you were in Queensland. Has not there been some rather drastic treatment of these diseases in Queensland lately?—Yes.

1689. Could you tell us what that is?—In Queensland the Government has issued an Order in Council declaring that in Brisbane and its immediate neighbourhood venereal diseases shall be compulsorily notifiable under the Health Act. The regulations which came into force on April 1st provide that if the Commissioner of Health or any medical practitioner suspects that a person is affected with venereal disease, the Commissioner may in writing require such person to submit herself or himself for examination by clinical and bacteriological methods. Queensland repealed its old Contagious Diseases Act about two years ago. It was the only State in the Commonwealth that had such an Act. There were certain members, in fact many members of the medical profession there, against its repeal, and I suppose this proposed legislation is a sort of compromise.

1690. This legislation has been actually carried out?—Yes; it has lately come into force.

1691. Has it not been made penal knowingly to communicate disease?—I believe so. At the 1911 Congress, after the whole question had been thoroughly debated by the combined sections, there were certain resolutions which were passed by the full Congress. They read that "(1) That in the opinion of this Congress a time will come when the compulsory notification of syphilis and gonorrhoea will be necessary, and the earnest attention of the Health Departments of the Australian States should be drawn to the matter with the object of introducing such notification when the time is ripe. (2) That it should be a legal offence for any person who is not a legally qualified practitioner to treat a case of venereal disease. (3) That each State Government be invited to provide increased facilities for the diagnosis and treatment of cases of venereal disease. (4) That general hospitals and dispensaries, rather than special or lock hospitals, should provide the necessary accommodation of these cases. (5) That it be a legal offence for any person cognisant of the fact he or she is suffering from venereal disease, to communicate such disease."

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1692. Has not something of that kind been provided for in Queensland? Is there not some legislation against quacks, or some deterrents exercised against them in Queensland?—I believe so.

1693. The resolutions were passed unanimously at the 1911 Congress held at Sydney?—Yes.

1694. In Victoria is there a very large amount of quackery going on?—Yes. I think that one can say that Australia is practically the home of quackery. We have all sorts of professors and herbalists.

1695. Is there much advertising of quackery in the newspapers?—There is a great deal.

1696. Has there been any attempt to put a stop to such advertisements?—Yes, there have been attempts from time to time. A Bill in Queensland passed its first reading and was then withdrawn. Similar attempts were made in Victoria, but nothing ever came of them. To an extent the Pure Foods Acts deal with the matter.

1697. Speaking generally, the attitude in Australia seems rather to be that the Government is waiting on public opinion to declare itself, and that if public opinion is with strong measures, the Government would be willing to legislate?—I think so. I think they are waiting on public opinion; but the public opinion is not forthcoming, for one very obvious reason, that it does not receive the support of the Press.

1698. But the effect of these Congresses, and the attention that had been paid to the subject in Melbourne must be of an educative character?—Yes. At the present time in Victoria there is an amended Health Bill before the Legislature which contains provisions not only for adequate and gratuitous treatment, but for the prohibition of treatment of venereal diseases by unqualified persons, and that will aim directly at quacks, and will equally apply to chemists or herbalists.

1699. Is public opinion likely to support the Government in suppressing quacks?—I think they are likely to support that provision of the Bill dealing with the treatment of these particular diseases by unqualified persons.

1700. (*Sir David Brynmor Jones.*) In reference to your statement as to the experiment for making syphilis a compulsorily notifiable disease at Melbourne, would you tell me more clearly upon whom the duty that is involved in compulsory notification was thrown?—Practically upon the Board of Health; that is, the Central Health Department acting through the local authorities who administer the Health Act.

1701. I understood you to say there is a Public Health Act, 1890, in operation in the State of Victoria?—Yes.

1702. And there is a Board of Health for Melbourne?—For Victoria.

1703. For the whole of Victoria?—Yes, a State Board of Health.

1704. Something like our Local Government Board?—Yes, something like it.

1705. I suppose I am right in calling it a State Act? I want to distinguish between that and a Commonwealth Act.—Yes, it is a State Act.

1706. Under this State Act the Board of Health has power to make certain Orders?—To recommend the Governor in Council to make an Order.

1707. The Cabinet?—Yes.

1708. Corresponding with our Council?—Yes.

1709. Have you here the Order that was made?—No, I have not.

1710. Could you give us the reference to it?—Yes. The Order was simply that syphilis was to be made a notifiable disease within the metropolitan area of Melbourne—a 10 miles radius from the Post Office—from the 1st June 1909 to the 31st May 1910.

1711. I daresay the medical gentlemen present may know what that means, but that does not tell me individually upon whom the duty of notification was placed?—Upon the medical practitioner.

1712. Then he, being the only person upon whom the duty is cast, is the only person upon whom any penalty is imposed in case of neglecting the Order?—Quite so.

1713. (*Mrs. Creighton.*) But you said only half responded?—Yes.

1714. So where did the compulsoriness come in?—The compulsoriness, as I said, was only compulsory inasmuch as it was official. It was an official Order practically from the Government that these cases had to be reported in an impersonal way. Had we simply sent a notification to the medical profession inviting practitioners to report cases, I do not suppose even half of them would have reported.

1715. (*Sir David Brynmor Jones.*) Then as I understand the Order, it was that syphilis was to be treated as a notifiable disease?—Quite so.

1716. That, of course, referred to some previous Order which had been made making other diseases compulsorily notifiable?—Yes.

1717. Was any advice given as to the true construction of the additional Order?—Yes, a circular was sent out to each medical practitioner.

1718. You know why I ask that, because supposing a man had locomotor ataxy—I do not know whether that was a notifiable disease already—would the medical practitioner, if he wished to comply with the Order, have felt bound to report locomotor ataxy?—Decidedly.

1719. Under syphilis?—Under syphilis. After the Order was issued a circular was issued by me as head of the Health Department and Chairman of the Board, explaining the extent and scope of the investigation.

1720. (*Chairman.*) You could give us that, could you not? Is that what you read at first?—Yes, about the primary, secondary, tertiary, &c.

1721. (*Sir David Brynmor Jones.*) I thought that was in connection with a resolution of the Conference; not in connection with the Order in Council?—No. We asked the medical practitioners, in order to arrive at as large a number of cases and cover as many as possible under different diseases, to report the following cases: all primary cases, all secondary cases, all tertiary cases, all cases of thoracic aneurism, aortic retroversion, apoplexy in young adults, locomotor ataxy, general paralysis of the insane and so on.

1722. That is an answer to my question. I did not know whether the word "syphilis" had been authoritatively construed at all. I see that that is so?—All those cases were reported, and they are all tabulated in Dr. Hiller's report. It is an interesting report, and if the Commission desires, I shall be pleased to put it in. All these cases are tabulated under headings as primary, secondary, tertiary, thoracic aneurism, aortic retroversion, paraplegia and so on. They are interesting inasmuch as they show the treated and untreated cases in the partial or negative cases.

1723. I gathered that the Order in Council did not apply to cases of gonorrhœa, but only to syphilis?—Only to syphilis.

1724. In answer to a question from the Chair you said, summing up the results of what I may call the Melbourne investigation, that a great deal of unsuspected disease of this class was disclosed by it?—May have been disclosed.

1725. What significance do you give to the word "unsuspected" there? Do you mean disease unsuspected by the patients or unsuspected by the profession, or by the general public?—Unsuspected is, perhaps, hardly a happy word. What I meant was that, but for scientific diagnosis of a wide range of cases included in the list I have just read, many of the cases may not ordinarily have been suspected by the medical practitioners as suffering from syphilis.

1726. I will tell you why I am asking you that question, because it has been suggested to us, if not from the witness box, in various things I have read, that a great many people are syphilitic who do not know that fact at all, and are syphilitic without any default on their own part?—That may be quite so.

1727. That is why I was asking you what weight you gave to the word "unsuspected" in your answer to the Chair. Do you think the investigation shows that a great many people who may be morally innocent, that is to say, who may not have contracted syphilis by illicit intercourse, may still be infected with the

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disease?—Most decidedly. I have cases here which came under our observation which I could quote.

(*Sir David Brynmor Jones.*) Perhaps you will give me an example. The chairman points out to me that the children were innocent; but I do not know what the definition of "children" by the law of Victoria is.

1728. (*Sir Malcolm Morris.*) He said under nine?—I am not quite sure, but I should say about nine was the age limit of the children mentioned in Dr. Lambie's report.

1729. (*Sir David Brynmor Jones.*) Taking the case of the children as to which you gave figures, they were all very young children, were they not?—They were very young children, many of them infants under one year.

1730. All those cases would come under the head of what you might call innocently infected persons?—Yes. I could put in Dr. Lambie's paper giving the ages exactly.

1731. (*Sir Kenelm E. Digby.*) On this question of compulsory notification, as I understand, there has been compulsory notification of diseases in Victoria since 1890?—Yes.

1732. Then is the effect of what has been done recently to place diseases where syphilis is either the cause or, at all events, one of the causes of the disease, on the same level as the diseases previously notifiable; or is there any difference between the ordinary notification of disease and the notification of diseases in which syphilis enters as the cause?—Our notification of syphilis I regarded rather as a registration than as a notification. It was altogether a secondary consideration with us; that is compulsory notification. What we were after was the scientific diagnosis and the early treatment which would follow on the notification; and while the notification did do something to tell us of the prevalence of syphilis in a certain proportion of the population, it certainly gave us some evidence upon which we could approach the Government and ask them to do something. I do not think that notification of syphilis can be placed in the same category as notification of other infectious diseases.

1733. I suppose if a disease were notifiable simply under the Act of 1890, there is some penalty for the breach of the duty to notify?—That is so.

1734. Fining or something of that sort?—Yes, a fine.

1735. Is there any fine attached to the breach of the duty of notifying syphilis?—Yes. It was only notifiable for that year and then it was dropped.

1736. When it was first made notifiable, was or was not a fine attached to the breach of the duty to notify?—A fine was attached but not imposed during those 12 months; because, as I say, only about half of the medical practitioners notified, and it would have been difficult to prove that the other half had made default.

1737. Therefore, it was really not compulsory?—No, it was not. It was compulsory more in word than actually.

1738. I am now on Victoria. Then really it was not compulsory in the ordinary sense of the term. Compulsory in the ordinary sense of the term means a legal duty which is attended with a penalty if the duty is not performed. It does not come up to that definition?—I am afraid it was not carried out to that extent.

1739. But it was not even on paper carried out to that extent, as I understand?—No, it was not. The onus of proof would have been on the Health Department, and in syphilis, *i.e.* the diseases covered by that term, it would have been difficult to prosecute successfully, and then the names of sufferers were not mentioned.

1740. (*Canon Horsley.*) A permissive obligation?—Yes.

1741. (*Sir Kenelm E. Digby.*) It really did not come to more than a very authoritative expression of opinion that it ought to be notified?—Yes, I think that is all we intended.

1742. That is all you really intended and all you have done?—Yes.

1743. With regard to what took place when you approached the Congress in Sydney, was not legislation required in order to get these wards as separate wards established, or anything of that sort?—No.

1744. No legislation was necessary?—No, only the agreement of the hospitals' committees.

1745. Was what took place merely a sort of negotiation between the medical profession or the Public Health Department and the Government, or did it come in any way before Parliament?—In other words, was it the subject of public discussion or debate in Parliament?—No, it was entirely an agreement between the hospital committees—between practically one Minister and the Treasury.

1746. Just as one goes to the Treasury here and asks for a certain amount of money for a particular purpose?—Quite so.

1747. A department will go to the Treasury and no one know anything about it except the department and the Treasury, till it appears in the public Press?—Quite so. The advisory committee had to overcome some little opposition on the part of the hospital committees, but that was all. It was an agreement entirely with the Health Department.

1748. Therefore, this really did not arouse public feeling or discussion, or did not bring home very much to the public what was going on?—Except that it was published in the papers that such an arrangement had been made.

1749. There was nothing like a debate in the Legislature?—No. The treasurer, now the Premier, told the legislature what had been done and both sides of the House agreed with the action taken.

1750. (*Sir Almeric FitzRoy.*) I noticed that you said out of 5,500 Wassermann determinations made during the 12 months, there were only 1,900 positive reactions. May I understand that a positive reaction is a test of what is called a general invasion of the system as distinguished from a merely local manifestation of the disease?—It is a physico-chemical test and it is what the man conducting the test would say was positive as distinguished from a partial reaction or negative reaction.

1751. Yes; but is this positive reaction only possible when you have reached a general invasion of the system by the disease? It is positive of syphilis, but to what exact extent I do not know. It may be positive in quite early stages, *i.e.*, the primary stage.

1752. You say that the Government have undertaken the whole of the expense. Does that mean until the results have been ascertained or during the subsequent treatment?—During the subsequent treatment.

1753. Until the patient can be released as cured?—Yes.

1754. Discharged as cured?—Until no longer infective.

1755. There is one point I want to put to you about the objections which are entertained, I believe, in this country to notification. It is said, owing to the fear of discovery and possible loss of employment, a person will refrain from coming under treatment, and have recourse to quacks. How far do you believe that to be true?—I believe it is very largely true.

1756. Could not you meet that by having recourse to legislative provisions, one making it obligatory for a man infected to take qualified medical advice, and a second prohibiting quacks from treating the disease?—We have suggested that.

1757. Do not you think those would be two very potent means of getting over the patient's objection on the score of the considerations I have mentioned before?—I think so, and they necessarily follow the notification scheme.

1758. Yes, it is a corollary. You mentioned that one of the causes why public opinion was not properly instructed on this matter, was the lukewarmness of the Press. Is it not the case that the Press, or a considerable section of it at all events, makes a very large profit from the advertisements of unqualified practitioners and, therefore, would be extremely sorry to see the practice suppressed?—That is said; I would not like to say so.

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1759. Is not the evidence of the report made, either by the Commonwealth Government or the N.W.S. State Government some years ago, proof of that?—Yes, very much so. But I understand that report was suppressed.

1760. I have a copy in my room and it would certainly give colour to that belief?—I speak with some knowledge, because I contributed to a portion of that report, and it certainly came before Parliament; but what subsequently became of it I do not know.

1761. You have only to scan the columns of the provincial Press in this country to know how largely they derive their profit from that type of advertisements and others?—I believe it is said that they do.

(*Sir Almeric FitzRoy.*) You have ocular demonstration of it, if you take a copy of a paper up.

1762. (*Sir Malcolm Morris.*) As a result of the circular that you sent, you say 5,500 cases were reported and 5,500 Wassermann tests were carried out, and the result was only 1,900 positive Wassermans. Have you any explanation of why there is such a large discrepancy?—There were 400 partial reactions.

1763. You include those?—1,900 and 400, that is 2,300 out of 5,500. Nothing was added for the negative reactions, though many of the negative cases were clinically syphilis. It may be that the antigen used for the Wassermann test was, perhaps, not so sensitive as the antigen now used. That I do not know, but it may make a large difference in the percentage of cases.

1764. Have you any means of knowing the different stages of the disease? Did you get reports with reference to the different stages of the disease?—Yes, we had it all tabulated in different stages.

1765. (*Chairman.*) You can give us that report, can you?—Yes, I can give it to you. It can be found in the Transactions of the Australasian Medical Congress 1911, now published.

1766. (*Sir Malcolm Morris.*) Have you formed any opinion as to whether the Wassermann is equally accurate in different stages of the disease? Take cerebral syphilis, what percentage of cerebral syphilis was there in the 5,500?—There were 34 cases of cerebral syphilis, of which 33 were males and one a female; positive 14, partial 7, 3 treated; negative 13, 5 treated; a percentage of 41. Dr. Hiller had not completed his report, and this particular report deals only with 3,190 cases which do not include the 550 cases in Dr. Barrett's clinique. Of a total of 141 parasyphilitic cases, 86 were positive, 10 partial, and 45 negative, a percentage of 61. There were 59 cases of tabes, of which 54 were males and 5 females, positive 34 and partial 2. Of these partials 1 was treated. There were 23 negatives of which 12 were treated, a percentage of 57.6. There were 48 cases of G.P.I., of which 38 were males and 5 females, 6 not stated; positive 38, partial 1 (treated); negative 9, 4 treated; a percentage of 79.

1767. Was there any large proportion of primary?—There were 111 total, positive 62, partial 6, 1 treated; negative 43, 7 treated; a percentage of 56.

1768. You would expect to have fewer positive Wassermans in very early stages of the disease?—Yes, there were more in the second and tertiary stages. There were 198 positive in the secondary stage, and 380 positive in the tertiary stage.

1769. Was there any means taken for early microscopical examination of early lesions?—You mean the microscopic examination of early lesions for the spirochæte?

1770. Yes?—It was carried out, but not in every case; in some only.

1771. So that, therefore, an investigation would not be of any real value. I mean there was not a sufficient percentage to be of any real value?—Of the microscope only?

1772. Yes?—No.

1773. You explained about the Children's Hospital port-mortems; a hundred cases of post-mortems with the pathologist on one side and the Wassermann on the other. Has there been any experience of Wassermann with dead blood from other people?—I do not know, but it was an experiment we tried.

(*Sir Malcolm Morris.*) Is there any reason to believe that the Wassermans with dead blood would be as trustworthy as the Wassermans with live blood?

(*Dr. Mott.*) It comes off quite well.

(*Sir Malcolm Morris.*) It is equal?

(*Dr. Mott.*) I should think it was very nearly equal; very few fail.

1774. (*Sir Malcolm Morris.*) Were control experiments done?—Yes. There appears to be some little misunderstanding as to these figures of Dr. Lambie. I could put in Dr. Lambie's paper.

1775. Only half the practitioners in the Melbourne district replied, you said. Were they the better half; that is to say, did the men who replied hold a better position?—Most of the leading practitioners replied.

1776. The better men did reply?—Yes, decidedly.

1777. Therefore it would not be fair to deduce from only half that there was half unaccounted for?—No.

1778. Because they were men in a larger practice, with more cases, who did report?—Quite so.

1779. Was there any active opposition from the medical profession to this sort of so-called compulsory notification?—Only at first, before they quite understood that it was to be an impersonal notification. There was some opposition at the time by a portion of the medical profession at meetings of the branch of the Medical Association. But when some of us addressed the meeting and explained that it was an impersonal notification and therefore would not infringe personal liberty, and no action was to be taken on the notification so far as the patient was concerned, then all opposition ceased, and they supported it.

1780. Was there any single case as the result of this impersonal notification, where individuals were put to discomfort by the facts getting out in any way?—I heard of no hardship whatever, and never heard of a complaint. There was no complaint officially made to me during the whole time.

1781. Can you give any sort of idea as to the amount of expense the Government of Victoria were put to in carrying out the Wassermans for a year free?—Yes. They first of all gave us 300l.; and I had to ask for another 150l., as Dr. Hiller required further assistance.

1782. That is what was paid for Wassermans during that time?—Yes.

1783. And what rate per bed was the Government of Victoria put to for the compulsory treatment?—The 24 beds at the Alfred Hospital came to something like 2,500l., I think, speaking from memory.

1784. Do you know the rate per bed?—No.

1785. Do you know the average duration of time that a bed was occupied?—No. That report would not be in until about a year after the wards were started, and I have not it with me.

1786. Was the amount of accommodation given in these various hospitals in any way adequate to the amount of disease?—It was at first; but I understand there has been a very large demand for beds owing to an important factor which perhaps you will allow me to mention; that is, in order to induce patients to come up for treatment we established a night clinique at the Alfred Hospital. Before that many of the beds were empty. Now, I believe there is quite a demand for beds owing to the staff encouraging people to come in for treatment, especially for salvarsan treatment.

1787. Was there any opposition of the working classes to coming into the hospital for treatment?—Not when they understood they were going into a general ward. There was a difficulty at first and some of the beds were not occupied, because in the first place young men did not care to come up in the daytime, or did not care to ask their employers to get away to seek advice on that particular subject. The night clinique, and the fact that they were not to remain in the ward for long, certainly did encourage these classes to submit to treatment.

1788. If you had had your way, would you have continued this particular process which has been carried out for a year, for a longer period with regard to compulsory notification, and the carrying out of the Wassermans, &c.?—I would not with regard to notification and, as a matter of fact, we have not

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continued compulsory notification during the past two years. Our notification was merely a means to an end, and that end was simply to secure scientific diagnosis and early treatment.

1789. What alternative plan would you recommend?—I would recommend, in the first place, that there should be a free Wassermann test that is free to all private practitioners whose patients could not afford to pay for the same.

1790. Private patients as well as public?—Private patients as well as public. I would recommend that there should be a free Wassermann test for public patients say, in different hospital laboratories; but in smaller communities it would be advantageous to carry it out in one laboratory by one man.

1791. And that would be paid for by the Government?—I think it should.

1792. How about the question of carrying out the salvarsan treatment?—We thought salvarsan treatment too expensive to ask many of our practitioners who are working amongst the poorer classes to carry out at their expense. As a matter of fact they would not have done it. In the second place it requires technical skill, experience, attention to details, and so forth. We asked that the salvarsan treatment should be carried out at the hospitals by a competent staff, and we asked that it should be free. The Government paid for the salvarsan supplied to the hospitals.

1793. In the hospitals?—In the hospitals. That amount came to a pretty considerable item.

1794. Would you recommend the same plan for private practitioners for people who cannot afford to pay for it?—I would.

1795. Have you anything at all which is equivalent to the Insurance Act in Melbourne?—No. But at the present time the Commonwealth Government, I believe, are talking about bringing in an Act somewhat on those lines.

1796. Are there many people of the working classes who are in clubs?—A large proportion.

1797. Are venereal diseases excluded from benefit in clubs?—No. Doses of salvarsan were supplied free to several of the poorer societies for use by the medical men.

1798. Then the societies were agreed to the use of it?—Yes; their medical officers asked for it.

1799. Did they as societies pay for the Wassermann test or was that independent of the societies?—No. The medical officer of the society could notify cases or send in specimens of blood to the Government laboratory for a free Wassermann test.

1800. Do you think there is any possibility of the legislature carrying out the recommendations of the Sydney Congress of 1911?—You see the Queensland Government have gone perhaps a little beyond them, and, as I indicated, in Victoria we proposed in the amended Health Bill a provision for the suppression of persons other than qualified persons.

1801. Is there any Act in Australia at the present time to prevent unqualified persons from prescribing for these particular diseases?—No.

1802. None?—None that I can think of.

1803. It is suggested that there should be?—Yes, it is suggested.

1804. Is there not some Act which has a control over the actual wording of quack advertisements?—Yes, the Commonwealth Commerce Act has done a great deal towards that end, but only with regard to quack medicines or proprietary medicines coming into Australia. They have the power of vetoing or refusing admittance to any quack medicine as to which extravagant claims may be made on the labels.

1805. Only from outside the country?—Only from outside.

1806. Is there no control whatever of the quack medicines invented and used inside?—No, there is no great control—only through the Pure Food Acts of the various States. There is, in that direction.

1807. (Chairman.) Has not the result of the prohibition of external quack medicines had the effect of inducing a very large manufacture in Australia?—Yes, I believe it has to some extent.

1808. (Sir Malcolm Morris.) As regards the question of its being a legal offence to communicate the disease when the person knew it, do you advocate that yourself?—Yes. I should have thought that would have followed on notification.

1809. But I understood you are opposed to compulsory notification?—Yes, at present, and until the full machinery, legislative and otherwise, can make it really effective.

1810. Then how about the legal offence? It would not follow on it if did not exist?—No. But I say we see no reason why it should not be made a legal offence at once, even without compulsory notification. The 1911 Congress agreed to that.

1811. It would be very difficult to prove, would it not?—It may be difficult to prove, but the same principle exists in other Acts. I think it would act as a deterrent, and I have recommended it. Even if you could only prove one case I think it would act as a deterrent.

1812. Is there any scheme in Australia for preventing people who are contaminated entering into the country?—Yes. There is Commonwealth legislation preventing the entry of syphilitics into the Commonwealth.

1813. How do they find it out?—They are examined here and at the other end.

1814. Is a Wassermann done in each town?—I do not think a Wassermann is done in either case.

1815. Has it been of any success in preventing cases coming in?—Yes, to an extent.

1816. What happens to them? Do you send them back?—We send them back. I know of several cases that came under my observation when I was Chief Health Officer for Victoria.

1817. They were only diagnosed clinically?—Yes, as a rule, but in two cases I know of Wassermanns were made at my suggestion, because I wanted to act quite legally.

1818. And you had the power to prevent those persons entering the country, and send them back because they had syphilis?—Yes, the Commonwealth Government had. They were treated at the Alfred Hospital.

1819. After that were they deported?—After that they were sent out and reported to the Commonwealth authorities.

1820. Do you think it would be feasible to carry out such a scheme in this country?—I think it would take a large amount of machinery.

1821. Do you think it would be a wise thing if the machinery could be brought to bear?—I think it would.

1822. (Mr. Lane.) I see this resolution passed by the Congress in 1908 says that "syphilis is responsible for an enormous amount of damage to mankind," &c. No mention is made of gonorrhœa?—Does it not say venereal diseases?

1823. No, syphilis?—In the 1908 Conference the whole controversy had ranged about syphilis, and it was not, I think, until the 1911 Conference they mentioned venereal disease as including gonorrhœa.

1824. Then in this so-called notification only cases of syphilis were notified?—Only cases of syphilis.

1825. Not of gonorrhœa?—No.

1826. So that it was not a notification of venereal diseases?—No, only syphilis.

1827. As regards your figures, there were 3,200 negative Wassermanns out of 5,500 cases. Those are the figures, I think?—Yes; if you subtract the 2,300 positive and partial, but these latter were interpreted to mean ten cases of syphilis for every six positive Wassermanns, which would bring the total up to about 3,160, a correction of about 40 per cent.

1828. I see Dr. Barrett in his paper says that out of those 5,500 cases, 3,167 were proved to be syphilis?—Yes. As I say, he takes the positives and the partials, and then allows for ten cases of syphilis for every six positives; many of the partials and negatives had been under treatment.

1829. But there is an enormous discrepancy between Dr. Barrett's figures and the 2,300 negative Wassermanns. He says 3,167 of these 5,000 cases were

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syphilitic, whilst you say 3,200 were negative Wassermanns?—You see the 2,300 only includes the 1,900 positives, and the 400 partials. There is nothing at all allowed for the 3,200 negative cases, many of which showed clinical evidence.

1830. (*Dr. Mott.*) It includes cases where the evidence of syphilis had disappeared through treatment?—Quite so.

1831. (*Mr. Lane.*) Dr. Hiller says of these 5,000, 3,167 were proved to be syphilitic. Do you know how they were proved to be syphilitic?—By Wassermann test. Dr. Hiller's figures gives the treated and untreated cases.

1832. I see your evidence is rather founded on the measures which have been taken in the Commonwealth of Australia, and not solely of Victoria?—Yes.

1833. Are you conversant with the legislative measures that have been taken in Queensland?—Yes; I have read them to you.

1834. Were you responsible for those?—No; that was after I left in 1909. I was Commissioner of Health for Queensland from 1900 to 1909.

1835. I do not think you read them all, because they are rather lengthy. I see here that in Queensland gonorrhœa is to be made a notifiable disease as well as syphilis?—Yes. I think this is quite recent legislation.

1836. In 1913?—Yes.

1837. It says that the Commissioner who was appointed to enforce these Acts "may in writing" require any person to submit herself or himself for "examination by clinical and bacteriological methods," "such requisition to state the name of the medical practitioner to whom such person is required to submit herself or himself, and the time and place of examination." Do you agree with that?—No, I do not.

1838. You think it might lend itself to abuse?—I think it savours very largely of a return to the old C.D. Act which was repealed, and I certainly was in favour of its repeal when I was Commissioner of Public Health there.

1839. Then as regards legislation for quacks, are you aware there is a penalty of 50*l.* or six months imprisonment for any other person than a medical practitioner treating these diseases?—In Queensland?

1840. In Queensland?—No, that must be quite recent legislation.

1841. That is the case at present?—I know of course that Queensland and Victoria are two States giving some attention to the resolutions by the Congress.

1842. I understand that in Victoria a free Wassermann test is recommended?—Yes.

1843. But there is no possibility of getting a bacteriological examination?—I think there is every possibility.

1844. But not a certainty?—I think that will come in time. I think it is necessary to have a microscopic examination of serous discharges and secretions in the early stages of syphilis, and also of gonorrhœa. It has not been done systematically.

1845. Not so much stress is laid on that early examination of secretions as on the Wassermann test?—I think they are both important.

1846. We know they are both important; but there is more importance attached to the Wassermann test here than to the examination for the spirochætes?—Yes.

1847. But the examination for the spirochæte will detect early syphilis?—Yes.

1848. And early syphilis can be treated and cured?—Yes.

1849. Whereas, if the Wassermann test is positive, it is a very difficult thing to cure cases of syphilis?—It may be, of course.

1850. You acknowledge that in primary syphilis it is rather difficult to get a positive Wassermann?—Yes, the percentage is lower than in secondary or tertiary cases.

1851. So that the Wassermann test is of no value in primary syphilis?—I think the microscopic test is the better test there.

1852. Therefore, the facilities for the examination of discharges would diagnose early syphilis, and would enable the practitioner to treat the disease when it was certainly curable?—Yes.

1853. The salvarsan is not given except in limited amounts in hospitals in Melbourne, I believe?—I think it is given, in fact, I know it is, by some of the medical practitioners, but it is now the routine treatment in our hospitals.

1854. But it is not very much in vogue?—No, not amongst private practitioners.

1855. I suppose on account of the ignorance of the technique. There are only a few practise it?—Only a few practise it.

1856. (*Mrs. Creighton.*) To return for a moment to this compulsory notification. I think I gathered from your answers that it was only a temporary arrangement in order to get as many as you could of the medical practitioners to help you in an investigation as to the prevalence of the disease?—That is so.

1857. Is that a correct statement of what you undertook to do?—Yes.

1858. Then as regards these investigations at the Children's Hospital, were they all post-mortems carried out during one year; or what was the period over which they were spread?—Do you mean those conducted by Dr. Lambie?

1859. Yes?—They numbered 100 and were all made in the one year.

1860. Yes. Then you gave us a very large number in which there was syphilis?—There were two sets of post-mortem examinations by Professor Allen, and he found in about one-third of those cases, 30 per cent. evidence of syphilis.

1861. What I wanted to know was whether those investigations extended over more than a year; and I wanted to know what number of children there were in the hospital, because one would really wish to know what proportion those cases bore to the total number in the hospital?—I do not know what the number of children was in the Children's Hospital at that time.

1862. Your figures only give us the proportion of cases in the children that died?—Yes; it was only intended as an experiment to see how far the histological evidence would agree with the Wassermann reaction.

1863. The Chairman remarked, or felt inclined to remark, what a very large number it was. But one cannot take that as the number of children suffering from syphilis?—No. I did not attempt to draw any conclusion from those figures. Dr. Lambie draws his own conclusions in his paper read at Congress.

1864. Then with regard to Government aid to hospitals for the treatment of syphilis, how are the hospitals in Melbourne supported?—They are supported chiefly by voluntary contributions, and they are also subsidised by the Government.

1865. So that it could not be said that the Government only subsidises the wards where syphilis is treated?—The Government practically paid for the whole of the expense of the treatment in those wards.

1866. That you told us; but I want to know whether the Government pays for anything else in the hospitals?—They pay on a certain basis for all the general treatment.

1867. All general treatment?—Yes. They subsidise the hospital on a certain basis, sometimes £ for £, or on some other basis.

1868. The hospitals are distinctly subsidised by the Government?—Yes, they are.

1869. (*Mrs. Scharlieb.*) Were those 1,500 cases, cases that were presumed to be syphilitic?—Yes, otherwise they would not have been reported.

1870. Then with regard to the 100 post-mortem cases of children, were they supposed to be children who had suffered from syphilis, or were they just 100 cases taken haphazard of children who died from whatever disease it may be?—They were 100 cases taken haphazard, and who died of many diseases.

1871. So that the fact of there being 54 per cent. shows at any rate that there was a very heavy percentage of syphilis amongst the general lot of children in the hospital?—Yes.

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1872. What co-operation was it that you asked of the National Council of Women?—To co-operate in an educational campaign; that they should place before mothers and teachers and others, the so-called moral side of the question. The Committee thought that the strictly moral aspect of the question did not concern them as such; but that that work was important, and the right information should be given in the right way by the right person. They undertook to do anything so long as we did not bring in the C.D. Act.

1873. Quite so. But they did respond to your invitation?—They responded very nobly.

1874. And they helped you very considerably?—They helped us very considerably.

1875. Have you any association there at all analogous to the Mothers' Union which we have in England?—Yes, I think so.

1876. A lot of women banded together to endeavour to maintain a high standard of family life?—Really I could not say definitely, but I understand there is something of that nature.

1877. And you found the co-operation really very useful?—We found the co-operation of the women very useful indeed, and they are a political factor in Australia.

1878. You find that people are destroyed for want of knowledge, and anything that tends to disseminate adequate knowledge of these troubles is likely to improve the health of the nation?—Yes. We sought to combat one thing that was said, and that was, that these diseases were punishments, and so on.

1879. (Dr. Mott.) Will you tell me how the blood was collected for the Wassermann test?—Yes, it was mostly collected either from the lobe of the ear or from the finger.

1880. Not from a vein?—Not from a vein as a rule.

1881. Do you regard that as satisfactory?—No, I did not, but had we asked the medical practitioner in each case to collect it from the vein, I am afraid we would not have got the number of samples we did.

1882. Still, it does throw a little doubt upon the value of the test, does it not?—Not if you have a sufficient amount of blood. But I must say a large number of samples sent in were rejected because there was not sufficient blood.

1883. Was the original Wassermann method employed?—The original Wassermann method was employed, or only with such modifications of it as Wassermann himself has suggested.

1884. Was the serum heated or treated by cold?—It was inactivated at 56° C. There is a full account of all the details in Dr. Hiller's paper.

1885. Was any indication given of the nature of the treatment and of the time it had been employed when the notification was sent to the central bureau? You know perfectly well, if you treat a case for some little time, the Wassermann reaction disappears. It seems to me that might account for the difference in the number of cases that Dr. Barrett estimated were syphilitic from the clinical side, and those which gave a positive or partially positive reaction?—Quite so. I think that is the explanation; in fact, I am sure it is the explanation. In the notification form it was asked how long the patient had been under anti-syphilis treatment.

1886. Can you tell me, was the Wassermann absent in a far greater number of cases that had been treated than in the untreated cases?—There are details of 3,190 cases, giving all those that were partial or negative and treated or untreated.

1887. Then we shall get that information, shall we?—I shall be pleased to put in this report.

1888. Did you come to any conclusion in respect to the value of the Wassermann test, and its disappearance under treatment as regards prognosis?—No.

1889. Was an examination of the cerebro-spinal fluid made?—Not systematically.

1890. Because you classified your cases into diseases of the nervous system, parasyphilis and cerebro-spinal syphilis?—Parasyphilis in which the percentage of positive results are low. There were tabes and cerebral syphilis and G.P.I.

1891. That is so. We distinguish between the late manifestations of syphilis of the nervous system, which is termed parasyphilis (wrongly, I think) and cerebro-spinal syphilis?—We grouped cerebral syphilis, tabes, and G.P.I. under parasyphilis, a total of 141; 86 positive, 10 partial (5 treated); 45 negative (21 treated); or 61 per cent.

1892. I do not understand, I must say, how you came to get 54 positive reactions in children dying at the hospital, and 14 part partial. It seems to me to be enormous?—Of the 100 cases?

1893. Yes?—For the histological cases there were 54 positive agreeing with the 54 positive Wassermans.

1894. And 14 partial?—Fourteen positive histologically of the 17 partial Wassermans.

1895. That is a very high percentage. Why I ask that is this. It has been said that children who have suffered from infectious disease like scarlet fever or measles may give this test?—I do not know. I do know that the Wassermann reaction was not known until the histological sections had been examined and reported upon by Dr. Lamble.

1896. Then I want to know what was the histological evidence of syphilis in this very large proportion of children dying in the hospital?—I cannot tell you that; but that is in Dr. Lamble's paper.

1897. That will be given to us, will it?—It is published in the Transactions of the Australasian Medical Congress.

1898. It seems to me extraordinarily high?—I have no copy here of Dr. Lamble's paper, but can get it. I have only copied his table giving the results.

1899. Then with regard to deporting persons coming into the country, would you advocate sending an emigrant back if his blood gave a positive Wassermann reaction, without any clinical signs whatever?—No, I do not know that I would; but there is the law, and the law says they are not to be allowed into the State. They pass out of the hands of the State into the hands of the Commonwealth authorities.

1900. They would not give him an opportunity of having a dose of salvarsan to see whether his blood would become negative, as it possibly would?—I dare say they would.

1901. Because he might have taken that before he came into the State, and then they would not have rejected him?—Then it raises a very nice legal point, I should imagine.

1902. It does; because as soon as the Wassermann reaction gets dull, a dose of salvarsan makes it disappear, and that as a test would not be of much use?—It would not, and I do not think the Wassermann would be relied upon entirely.

1903. But do not you think it is very important that the Wassermann reaction should be standardised wherever it is used?—I think it is of the utmost importance that it should be standardised, and, as far as possible, that it should be carried out by one man. I mean a given set of determinations should, as far as possible, be carried out by the one man.

1904. Supposing there was a case occurred in which the clinical symptoms were very doubtful and a positive reaction was obtained, before rejecting that man from service or deporting him, would you say, "I would like that examined by an independent person"?—Yes, personally I should. As a matter of fact I do not think that, with a positive Wassermann and negative clinical evidence, they would deport a man from Australia without further evidence of it.

1905. Yet if he gave a positive reaction with all dilutions, he might be a general paralytic?—He might.

1906. And he would go into the asylum and be a burden to the State for some years?—That is so; but I am afraid they would not deport him without the clinical evidence as well.

1907. Because it is very difficult to diagnose general paralysis of the nervous system?—Yes.

1908. And if you had a positive Wassermann in all dilutions and you gave him salvarsan and he was still positive, you might think that very possibly it was one of those cases?—Yes.

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1909. (*Canon Horsley.*) With regard to the phrase "compulsory notification," it is rather more a phrase than a fact, is it not?—Yes, it is.

1910. Have you compulsory education in Australia?—Yes.

1911. If half the parents neglected to send their children to school and incurred no penalty, would you still call it compulsory education?—No; but I do not think the two are quite the same.

1912. I took down some words. You said that there is an Act empowering you to exclude from the country medicine for which extravagant claims are made?—Yes.

1913. Would that include alcohol?—Yes, in patent medicines if of more than a certain amount.

1914. Whiskey, which is a medicine for which extravagant claims are made?—It would not include whiskey, *per se*; but it would include it if whiskey were put into some quack medicine to a larger extent than was divulged on the label.

1915. With regard to these 5,500 cases, that is about one-tenth of the population of Melbourne?—That would be only 55,000 population.

1916. The last figure I have for Melbourne is that the population is 544,000?—590,000.

1917. I have the figures for 1908. Roughly speaking, it is the same size as Birmingham. Birmingham is 558,000 and Melbourne 544,000?—I think it has grown since then.

1918. So has Birmingham. On the other hand, only half the cases have been notified. There are a great many more not notified, you say?—Yes, no doubt.

1919. As many again, you say, as it does not include gonorrhœa?—No.

1920. Therefore the prevalence of the disease is very large there, is it not?—It is very likely that it is.

1921. A great deal of what I call the non-births are due to syphilis—abortions, miscarriages and so forth?—Yes.

1922. Therefore, the prevalence or non-prevalence in Australia would be in direct ratio to the birth-rate?—Yes, to an extent only.

1923. The birth-rate in Australia in 1865 was 41·9 for the whole of Australia—I am taking these official figures—in 1875 it was 37·3, in 1885, 35·2; in 1895, 31·5; in 1899, 27·35; and now I see from the last figures I can get, the birth-rate for Melbourne is down to 23·9. It is a drop, in Melbourne at any rate, from 41 to 23, which, of course, is very serious?—Yes.

1924. And the prevalence of syphilis would possibly account for it?—It may be one factor.

1925. May I quote also from the "Lancet" on that point? "The birth-rate in the Australasian colonies and amongst British Canadians is little higher than that of France, and, unless the British become more fertile, it is doubtful whether the British Empire will long remain British in anything but name." That is true unhappily, apparently as regards Australia. There is a tremendous fall in the birth-rate?—Yes.

1926. From 41·9 to 23·9 is a very serious matter?—It is a very large fall.

1927. Therefore, it is extremely important not only to see what medical science will do to cure the disease, but still more to try to prevent it?—I think the early treatment will be a prevention, if I may so express it. For every case in its active manifestation cured there may be many cases prevented.

1928. If a man is cured with salvarsan or something like that, he is not necessarily cured of fornication although of syphilis?—No.

1929. Therefore you want, as you rightly said, the aid of these ladies and everybody else to direct considerable attention to the morals of Melbourne?—Of course the educational factor undoubtedly is an important one. It was not our business as medical men to go into morals.

1930. In New South Wales there is an Act providing for the detention of anyone suffering from venereal disease. Is that only in New South Wales?—Yes, that is the Prisoners Detention Act of 1908.

That provision was recommended by the Committee I spoke about.

1931. There is an Act to that effect?—There is an Act to that effect.

1932. I do not know whether you do the same idiotic things in Australia that we do; but suppose a man gets three days for being drunk, is he possibly detained six months?—No, it is only convicted prisoners.

1933. It does not matter how short his imprisonment was?—If he is a convicted prisoner. The section in the Prisoners Detention Act, 1908, of New South Wales provided for the detention of any convicted prisoner found to be suffering from venereal disease for medical examination and treatment until no longer infective.

1934. That is only in New South Wales?—Yes; but that was recommended for the various Governments for amended or new legislation.

1935. I see Dr. Barrett, among other things, points out that in Australia the question of poverty does not enter into the question of prostitution at all?—No, I do not think it does.

1936. However much or however little it may be a cause in England, it is not much of a cause there at any rate?—No.

1937. (*Rev. J. Scott Lidgett.*) I understand you say that so far as half the practitioners of Melbourne are concerned, the temporary system of notification worked well?—Yes.

1938. May I ask why it is that you are not in favour of adopting that as a permanent practice?—The compulsory notification?

1939. Yes?—It served its purpose at the time, but I think it may now act as a deterrent to the very object we were trying to achieve, namely, early treatment and early diagnosis of cases.

1940. Do you found that opinion on reasoning, or upon observed results of this 12 months period of this notification?—I think the fact that only half the number of practitioners forwarded returns shows that at any rate there was a disinclination on their part to report these cases.

1941. But I understand it was clearly explained to them that this was a merely experimental thing?—Yes, so it was; but the very fact that it was experimental induced at least one half the practitioners to notify. Without the Wassermann applied in each case, compulsory notification of cases alone would have failed.

1942. Would they not be more likely to do it if it were the adopted policy of the State, than if it were merely suggested to them as a useful experiment?—No, I think as a useful experiment they were very much concerned in the result from a diagnostic point of view, and they no doubt, learned a great deal from that experiment. The voluntary system of notification, now that the results of the experiment are known and appreciated, I think, bring larger returns from the medical practitioners than any compulsory scheme.

1943. You think if it were generally known by the public that in any case where syphilis or venereal disease was suspected, that would be privately notified to a Government Department, the effect would be that people would not apply for treatment?—I do not say that would be the general effect; but I do say it might act as a deterrent, and anything that would act as a deterrent would be an undesirable thing.

1944. I did not clearly understand your reply. Was that the result of your own experience over the 12 months, or a general reason?—It was the result of my own experience during that 12 months of so-called compulsory notification. The compulsory notification was merely a means to an end, and, having secured that end, I have come to the conclusion, that if we went on with the compulsory notification, we would not get as many cases as if we instituted a voluntary system of notification.

1945. Do you know whether any permanent policy has been adopted by the Health Authorities of Victoria as the result of this experiment?—Yes, as I say, in an amended Health Bill now before the House there are provisions for early and scientific diagnosis, adequate and gratuitous treatment of patients, the prohibition

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[Continued.]

of treatment by unqualified persons, and for making the voluntary transmission of venereal disease a penal offence.

1946. When was that Bill first introduced?—That Bill is now before the House.

1947. At the present time?—At the present time.

1948. You spoke of a calculation that for every six cases of syphilis that were revealed by the Wassermann test there were really 10; is that so?—Yes, a correction of 40 per cent., i.e., 60 positive cases equal 100 cases of syphilis.

1949. May I ask upon what you base that conclusion? Was it upon general reasoning or upon other pathological evidence that was available in the cases where no reaction took place?—Partly on general reasoning; but chiefly on experience of other observers in other parts of the world.

1950. You spoke of a number of cases submitted for examination being rejected because there was not sufficient blood. Are those cases included in the 5,500 returns, or are they additional?—No; their determinations were not made at all. They were cast aside.

1951. (*Canon Horsley.*) May I ask one more question. Is there any reluctance by people to have the blood taken?—Yes, there may be, if it is explained to them that it is taken because they are suspected to be suffering from this disease; but there is no difficulty at all if the medical man says "I would like to take a sample of your blood for examination," as is often done for many reasons.

(*Canon Horsley.*) I think there might be more in England. If a doctor comes and says "I will have your blood," he does not always get it.

1952. (*Rev. J. Scott Lidgett.*) You spoke of requesting the co-operation of this Women's Council, I think you said on moral grounds?—From an educational point of view, to teach women and to teach the mothers

1953. Was that in order that they might emphasise the physical consequences of self-indulgence, or that they might bring moral influence to bear?—It was to emphasise, in the first place, the facts: to let mothers and women know the real facts elicited in our investigations; what syphilis did and what it could do; all about it.

1954. (*Sir John Collie.*) I suppose irregular practitioners or quacks in Australia are responsible, as they are in this country, for the spread of disease by improper treatment?—Very likely.

1955. Do you think that compulsory notification of venereal disease would send people to quacks?—It may.

1956. Do you think it is likely?—I think they go to quacks now without it.

1957. Do you think it would send them in larger numbers?—Yes, I think it may.

1958. I did not quite gather when you instituted those experiments so far as Wassermann is concerned. Was it two years ago?—Yes, during the notification period, 1st June 1910 to 31st May 1911.

1959. Without in any sense minimising the value of them, I want to ask if you would agree, if you were to perform this same series of experiments now with the advances that have been made since you made them, that you are likely to have more satisfactory results?—I think we might perhaps, if we used a more sensitive antigen now than we did. We carried out the Wassermann reaction on the original method of Wassermann and with only the modifications suggested by him; but I would rather that the pathologists answer that.

1960. I was thinking of primary sores and the microscopic examination for spirochaeta and so forth. I think I gathered from you that had not been carried out?—Not systematically carried out.

1961. Then with regard to gonorrhoea in women, I suppose you will agree it is a very much more serious thing than is generally supposed?—Yes, it is very serious.

1962. With regard to the incidence of syphilis in the infant population, have you notification of still-births in Australia?—Yes.

1963. So that you get a notification for all the syphilitic still-births there are?—Yes. We get them as still-births.

1964. (*Mrs. Burgwin.*) You spoke about the co-operation of the National Council of Women. Would you mind telling me who elects that council?—I believe they have branches in all the States, and the council is elected by the members of the various branches.

(*Mrs. Burgwin.*) It has nothing at all to do with the Government in any way.

(*Mrs. Creighton.*) If I may interrupt, it is exactly on the lines of our National Union of Women Workers.

1965. (*Mrs. Burgwin.*) From a letter I had, I thought they held a more definite status with regard to their recommendations, and so on?—They have a very great status. Most of the society ladies, the Governor's wife, for instance, and most of the wives of the professional men, are members. They have a very large influence

1966. So that the educational propaganda that you said helped you so much was purely amongst adults, I take it?—Purely amongst adults. It was left, of course, to the medical-women members of the council to suggest upon what lines this educational propaganda might best be carried out.

1967. And, of course, it was carried out by them for men and women?—For men and women.

1968. You stated that the hospitals in many instances refused to treat syphilitic cases?—They refused to take them in at first. That was some years ago.

1969. Why did they refuse?—Why do they refuse in England?

1970. That is what I want to know?—They refused because they had no special accommodation for the treatment of these cases. Most of the hospitals had byelaws which prevent them accepting these cases.

1971. That is what I wanted to know. They really have byelaws which prevent them?—In some hospitals they have.

1972. Then you agree that institutional treatment is generally required?—I think that the best treatment of all would be in the wards of the general hospital.

1973. You, therefore, advocate that a ward should be set apart in the general hospitals?—In the general hospitals.

1974. With regard to the quack treatment, may I ask you what you exactly mean by "treatment"? If I may explain, supposing a person goes to buy a bottle of patent medicine, do you call that treatment?—No. When speaking of treatment I mean scientific treatment, I do not mean treatment by unqualified persons without any medical knowledge of the case.

1975. You used the word "treatment." That is not treatment, is it?—I would not call that proper treatment.

1976. Is it not a fact that in connection with many of these quack medicines there is a large company with much money in it?—In Australia?

1977. Yes?—I daresay there are many.

1978. That might make an influence felt in Parliament. When you say you found it difficult both for the Press and Parliament to get in certain reforms, which I think we all admit are necessary, if there were a big company with much money in it it would be more difficult to suppress than to suppress one man with his name to a quack medicine.

1979. (*Chairman.*) I do not think a company gets much in Australia now, does it?—No, they keep them out very stringently.

1980. (*Mrs. Burgwin.*) Then you would agree that one of the most necessary reforms would be the suppression of these quack medicines?—You mean from a prophylactic point of view so far as syphilis is concerned?

1981. Yes?—I think the suppression of so much quack medicine is the suppression of the quack.

1982. You only know him through his medicine generally. He advertises, does he not?—He does; but, at the same time, I think even a chemist prescribes a good deal for these people, and I should not call him exactly a quack. But that is treatment all the same.

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1983. And, of course, it would be useless to have, as you state here, half the medical profession notifying and half not, because would not that have the result that the doctor that was known to notify—and those things do get out—would be carefully avoided by the people who were infected?—It would not be fair to the other man, would it?—No; but if it were a compulsory notification they both would.

1984. That is what I mean. Then it should be really a compulsory act, would it not?—If you are going to carry out the whole thing.

1985. And I take it you agree that you would carry out the whole thing?—I think later on one would. Perhaps the time is not ripe yet for all the machinery; but some of it is very essential, and we have given effect to what we consider essential.

1986. (*Dr. Newsholme.*) I did not gather from any answer you gave, whether any fee was paid for the notification of cases?—Yes, the ordinary fee of 1s. 6d.

1987. How was the notification brought about? You have a Public Health Act under which certain acute infectious diseases are included, I presume?—Yes.

1988. Was syphilis added by Order to the list?—Yes.

1989. With regard to these other acute diseases like smallpox, for instance, certain important restrictions are imposed upon the persons suffering if they expose themselves, and so on?—Yes.

1990. Did these restrictions apply also to syphilis, or were they not applicable?—They were not applicable because we did not know the names of persons reported. It was an impersonal notification.

1991. Although you had no names, I gather you did have the district indicated from which the case came?—Yes.

1992. How many districts are there in Melbourne?—I should say somewhere over 20.

1993. So that you would know the number of cases in each of those 20 districts?—Yes.

1994. What was the object of putting in the district if the notification was intended to be anonymous?—Only to try and prevent any overlapping of notification.

1995. Then you drew your net very widely by including all kinds of parasyphilitic diseases as well as primary syphilitic diseases?—Yes.

1996. Did the compulsion apply equally to all of these?—Yes, to all.

1997. In extending the notification to syphilis, did you have a defining term? Did you state what the disease of "syphilis" would include?—Yes, in that circular we sent round.

1998. That was the accompanying circular?—Yes.

1999. But that had no legal validity, I take it?—No.

2000. That was merely advice to the doctor?—It was merely advice to the doctor, and said that syphilis meant that.

2001. Supposing the doctor took another view of the matter, and declined to admit that arterial degeneration due to syphilis was syphilis; what would happen then?—He would not notify.

2002. Supposing again that he thought that locomotor ataxy due to syphilis 20 years ago ought not to be included?—Then he would not notify it.

2003. The same with general paralysis, and so on?—Yes.

2004. And you had no power to compel them in those cases?—No.

2005. It was left entirely to the free will of the notifying doctor to decide which cases ought to be included, or ought not, under syphilis?—Except that the list in the circular acted as a guide to him.

2006. But if he took a different view to yourself, not having defined the disease, you could not enforce any penalty against him?—No, we could not.

2007. I gather that you do not recommend compulsory notification at the present time in the circumstances of Victoria?—No.

2008. You rather regard it not as a question of notification, but as an experiment indicating by means

of the Wassermann test how much syphilis there was in Melbourne?—Yes. It gave us some idea as to the prevalence of the disease.

2009. So that that being the case, it not being in any substantial sense of the word a true compulsory notification of syphilis, would you not have done just as well to provide free Wassermann and leave out entirely the question of compulsory notification?—No; because I think we should not have got the number of samples we did.

2010. On that point I would like to ask another question. You informed the Chairman that blood had to be sent in every case. Wherein came the compulsion to send blood?—There was no compulsion. They might have notified without sending in blood at all; but they were paid for a notification.

2011. Were they paid for sending the specimen of blood also?—No; they were paid for the notification.

2012. So that a doctor who merely sent the notification without sending a specimen of blood, would have completely fulfilled his obligatory duty?—He would; but not his duty to his brother practitioners.

2013. Notwithstanding that fact, in every one of these cases you did manage to get a specimen of the blood?—In those 5,500 cases?

2014. Those were the total cases?—Yes. Some samples not counted in these did not contain sufficient blood for the test.

2015. The intention was the same. In all the cases compulsorily notified you did get a specimen of the blood?—Yes, we did.

2016. But the taking of the specimen of the blood was a completely voluntary act on the part of the doctor?—Yes.

2017. Being a completely voluntary act on the part of the doctor, I suggest to you you would have got those 5,500 specimens merely by arranging for the Wassermann without any compulsory duty of notification?—I am very doubtful about that. It was the official arrangement with the profession that told. Had we simply said "We are going to carry out experiments; we want as many as possible to send in samples of the blood for free Wassermann test," I do not think we should have got the response we did.

2018. But the fact remains, I think, that the voluntary act of sending the blood was just as general, and without exception, as the compulsory act of notifying?—I cannot say I agree with that; because the experience of Sydney, where they had no compulsory notification, was that only a very small number of cases were reported. They say: "A committee appointed by the Congress of 1908, and consisting chiefly of medical men resident in Sydney, reported at the 1911 Congress as to the work done in Sydney in the interval. Medical practitioners in the metropolitan of Sydney had been asked to keep a record for the six months, 1st October 1910 to 31st March 1911, of all cases of syphilis seen by them during that period," and they were also asked to send in samples of blood. Now, "the response was very meagre, only 20 returns being received from private practitioners."

2019. Then do you suggest to us that the practitioners in Melbourne were cajoled into sending the blood by the duty of compulsory notification?—They were interested in the experiment.

2020. And one without the other would not have been efficient. That is your point?—Yes, that is my point. It would not have been official unless it had been compulsory.

2021. We will imagine a case. Supposing the State issued a statement to the effect that every practitioner was recommended to notify cases of syphilis accompanied by a specimen of blood, that would have been a request. Would that have answered the same purpose?—No, I do not think it would. I do not think it is a request so much as an obligation. There was an obligation there.

2022. Obligation is compulsion?—Obligation is compulsion if—

2023. If it is enforced?—Yes, but could not be enforced. Whatever interpretation you may place upon compulsion, those cases never would have been

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notified by private practitioners had it not been understood it was an impersonal notification.

2024. You were not in favour of compulsory submission to examination?—No, I was never in favour of that.

2025. But you are in favour of compulsory treatment. Supposing a person refused treatment, I gather from your paper that you are in favour of compulsory treatment?—I am in favour of compulsory treatment for those cases only that will not submit to treatment and then only as a part of the machinery of compulsory notification in its full meaning.

2026. Imagine a case. In England we have to a very large extent, for over 50 per cent. of the births, a notification of still-births after the seventh month, and a large proportion of those are due to syphilis. A health visitor visits the house after this notification of still-birth; a report is made to the medical officer of health, and the medical officer of health may go there. He obtains a history of two or three previous miscarriages, and he is satisfied that those miscarriages and the recent still-birth are due to syphilis. How would you apply your principle of compulsory treatment of that syphilis in the mother in that case?—I merely suggested compulsory treatment in my paper read at the Congress as part of a compulsory notification scheme. After full debate the Congress did not favour the compulsory scheme at the present time, and we in Victoria agreed with that resolution.

2027. I am not asking this to cause a difficulty, but really to elicit information that may be helpful here?—Quite. You could not compel the treatment until you were quite satisfied with the diagnosis.

2028. We will assume, and I am practically certain, that those premature births are due to syphilis, which could you do?—You say she had a positive Wassermann reaction?

2029. Yes, assume that too: that you found a positive Wassermann. How would you apply your principle of compulsory treatment?—I do not know that you could or would apply it, unless you had the whole machinery of compulsory notification and the necessary measures which follow it, viz., legal powers to segregate and to treat cases if necessary. They are part of the whole scheme of compulsory notification.

2030. And such compulsory machinery I gather you do not recommend at the present time, until you have exhausted the possibilities of free diagnosis and free treatment?—Yes, that is the position.

2031. (*Chairman.*) I think you said people suffering from syphilis were excluded from Australia. Does that apply to persons suffering from gonorrhœa?—Yes, it applies to venereal disease. The Act says "venereal disease"; therefore it would apply.

2032. In the general census of venereal disease which you took in Victoria, you relied mainly on the notification?—Yes.

2033. You did not make examinations into all the hospitals, or the workhouses, and all the public institutions generally to see what you could find there?—Yes, we did very largely.

2034. Were all the private practitioners consulted and asked to send private returns?—Yes, that is so.

2035. So that you think you have exhausted all the possible means of making a census?—Yes. We had specimens sent from the asylums. The positive percentages from the lunatic asylums were fairly large. We also had samples of blood forwarded from the idiot asylums and the hospitals, and even from the gaols, as well as private practitioners. We made the investigation wide.

2036. You think you got to the bottom of it as far as inquiry could go at that time?—I do.

2037. I suppose other notified diseases are reported?—Yes.

2038. The ordinary diseases?—Yes.

2039. And in either, if there was no notification, there would be a penalty attached, I suppose?—Yes, there would be a penalty attached.

2040. And that penalty would be enforced?—That penalty would be enforced if it were a notifiable disease, because there would be a sufficiently equipped organisation to carry out any action that it would be necessary to take. It would be comparable then to, say, smallpox, where a person could be apprehended and placed in quarantine to undergo compulsory treatment if necessary.

2041. In these cases fines are applied?—In those cases fines are applied.

(*Chairman.*) We are very much obliged to you.

The witness withdrew.

SEVENTH DAY.

Monday, 8th December 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

The Right Hon. Sir DAVID BRYNOR JONES,
K.C., M.P.

Sir E. KENELM DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Mr. FREDERICK WALKER MOTT, F.R.S., M.D., called and examined.

2042. (*Chairman.*) You are, I believe, pathologist to the London County Council?—I am pathologist to the London County Council's asylums.

2043. And you have given a considerable amount of study to venereal diseases?—For about 16 years I have been interested in this subject.

2044. You have given us some very useful figures showing the comparative incidence of admissions and

deaths of cases of paralytic dementia, in the London County Council asylums?—Yes.

2045. Of the general results you bring out from all the asylums, I see that over 8 per cent. of the total admissions are due to general paralysis?—Quite so.

2046. And a little over 15½ per cent. of the total male admissions are due to the same cause?—Yes.

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[Continued.]

2047. In the graph you have given us, you show, first of all, at the bottom, the average daily number of patients in the asylums; then you give two curves above that showing the number of general paralytics admitted yearly, and then the annual deaths from general paralysis?—Yes.

2048. Apparently the average daily number of patients in asylums is growing steadily?—Very steadily. There are about 20,000 patients in London County Council asylums, there are about 7,000 odd in the asylums of the Metropolitan Asylums Board and the other asylums like Bethlem, St. Luke's, and so on. But this only deals with the London County Council's asylums.

2049. Probably the same general results would be produced if we could deal with all asylums in the country?—I do not know that, because I think the incidence of general paralysis is very much greater in our large cities than in rural populations.

2050. Would it be worth while to try to get comparative figures of the same character from some of the asylums which deal more with the rural areas?—Yes, I think it would be very useful.

2051. These other curves dealing with the number of cases of general paralysis admitted and dying yearly, follow each other very closely?—Yes, they follow each other very closely.

2052. That was to have been expected, I suppose?—Yes, because a general paralytic, after admission to the asylum, does not last very long; the average time is about 18 months. It may be several months or several years, but he is almost sure to die within a year or two. There are, of course, exceptional cases which last much longer, but, as a rule, a patient dies within a year or two of admission.

2053. The number of asylum patients, as we have said, tends to increase. But the number of general paralytics admitted does not increase in anything like the same proportion. How do you explain that?—The reason is, as I have just said, that the paralytic dements die within a year or two of admission; whereas patients suffering from other forms of insanity may live a very long time indeed. In fact, in the London County Asylums some years ago it was estimated that over 10,000 had been in the asylums over 10 years and 4,000 over 20 years; so that there is a constant accumulation, and that accumulation is often thought to mean a great increase in insanity. But it is rather the result of accumulation than an increase.

2054. It is not a real increase?—No, it is an apparent increase rather than a real one.

2055. Then, as regards these general tables, have you any other remarks you would like to make upon them before we go to the Duration of Life Tables?—There is one point to be brought out, which is that the population of London is a stationary population and has been for the last 15 years; consequently, we have no evidence in that stationary population of any diminution in the amount of general paralysis during the 15 years.

2056. Would there be any reason to suppose there might be a diminution, assuming the population remained stationary?—A reason might be deduced that the treatment is more efficient than it was.

2057. Or that there is less disease?—Or that there is less disease. But this being a stationary population, it looks as if there is no diminution.

2058. In other words, we can learn that there has certainly been no diminution of the disease in late years, and there may have been an increase?—Precisely so. I should think probably about another 100 cases are admitted into the other asylums that I have mentioned, or die in hospitals or infirmaries or in private homes, because some cases of general paralysis are not received into asylums; they die in their homes.

2059. (Canon Horsley.) Or the workhouse?—Yes, or the workhouse.

2060. (Chairman.) Referring to the table of duration of life after admission to asylum of cases of paralytic dementia and certain other diseases, apparently the age at which this disease is most fatal is from 35 to 40?—Yes.

2061. It mounts up to that period and then it steadily dies away?—Yes.

2062. In each of the 402 male cases which are dealt with in this table, I suppose the Wassermann test was applied?—I cannot say that, because the Wassermann test has only been known for the last four years, but every case in the last four years has been tested. But there is no doubt about the diagnosis, because it is the easiest disease of any to diagnose post-mortem. These figures refer to post-mortem results.

2063. Then, taking the significance of disease of the aorta in these 546 post-mortem examinations of both sexes, what do you deduce from that?—I think both graphs show that disease of the aorta occurs at a much earlier age and with much greater frequency, both in males and females, in cases of dementia paralytica and other forms of insanity. Where there has been marked atheroma or nodular fibrosis, we have found evidence of syphilis in a great many of the cases that were not paralytic dements. We have found cases of aneurism, cases of gumma of the brain, obvious scars of syphilis on the body, so that it is even more marked than this graph shows.

2064. More marked, you say?—Yes, for that reason.

2065. You have not, I think, given any figures for cases of locomotor ataxy in the asylums?—The cases of locomotor ataxy that come into the asylums, *quâ* locomotor ataxy, are not very numerous. About 10 per cent. of the cases of dementia paralytica that die are cases of locomotor ataxy which have become demented; that is to say, the two diseases are pathogenetically, and, I think, pathologically, one and the same disease affecting different parts of the nervous system. Locomotor ataxy, or tabes, as I should prefer to call it (because locomotor ataxy is a symptom and not a disease) there are many cases of tabes that never have locomotor ataxy at all and yet suffer with this disease—these cases are, as I said, pathogenetically the same as dementia paralytica. Should I give reasons for that?

2066. If you please?—The reasons are, that in practically every case you can get a history of syphilis, or you cannot exclude syphilis from locomotor ataxy or general paralysis. Ten per cent. of the cases of locomotor ataxy or tabes subsequently develop dementia paralytica and die in the asylums of the latter disease. A considerable number of cases of dementia paralytica are associated with the lesion of locomotor ataxy in the spinal cord. Some French observers went so far as to say that two-thirds of the cases show spinal lesions, but I do not think it is nearly so much as that. Then in cases of conjugal affection—that is to say, where the husband suffers from dementia paralytica, the wife may suffer with locomotor ataxy, or the converse may occur—the one has infected the other and it has taken a different form. In congenital syphilis you have cases of tabes occurring in the children which may become dementia paralytica, or you may have cases of optic atrophy, which is a form of tabes, or locomotor ataxy occurring in children just as in adults. So there are many reasons of that sort for believing that the two are one and the same disease; in fact, that was Fournier's original statement, and all the events since seem to prove it. Then another point one may mention is that both diseases do not yield to treatment in the same satisfactory manner as obvious diseases, such as syphilitic disease of the nervous system. Another important point is that the average time after infection for symptoms of locomotor ataxy to come on is 10 years, the same as in dementia paralytica; so that you find the maximum number of cases of dementia paralytica, and the maximum number of cases of tabes, occur in the third and fourth decades of life; but, of course, one is much more fatal than the other.

2067. Then, I suppose, we may take it that the two diseases, tabes and paralytica dementia, are really different manifestations arising from the same causes in the human body?—Yes, that is so.

2068. You have given us statistics of adhesive inflammation of the oviducts arising from venereal disease, in female cases of dementia paralytica?—Yes.

2069. And you have compared them, I see, with other forms of disease associated with insanity. Will

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[Continued.]

you give us your deductions from your investigations in that direction?—I investigated this first of all to prove that the women who suffered with dementia paralytica were women who had suffered with venereal disease in some form or another. If they had gonorrhoeal infection they were likely to have syphilitic infection. And when one found such an enormous percentage as 50 per cent. of all the women dying of dementia paralytica showing this obvious evidence of venereal disease, it seemed to me to be striking proof of the importance of venereal infection in connection with the incidence of dementia paralytica in women. That all accords with what one would expect from the figures, which are shown later, with regard to the incidence of dementia paralytica in the East End populations as compared with West End populations. There is a higher percentage shown amongst males in the West End population, and a higher percentage amongst females in the East End. A good many of these women, I have no doubt, were originally prostitutes. I cannot prove it, because they do not put that down in the records, but I think probably a good many were. Of course, it is important also from this fact, that it shows why you have sterility so frequently, because this produces sterility; it is the cause of sterility especially.

2070. The two graphs showing the incidence of atheroma in males and females are strikingly alike. Is that what you would expect?—Yes, it is quite what I should expect. They show the importance of syphilis in producing this degenerate condition of the arterial system. And especially when one finds that formation which I have called nodular fibrosis, which is really proof of syphilis, or syphilitic infection, and is probably the late manifestations of the actual invasion by the syphilitic organisms of the arterial structures. Atheroma is a degeneration which occurs in old age independently of syphilis, but this nodular fibrosis which is so frequently met with is the result of the syphilitic infection.

2071. Then in these two graphs you show two curves: one is the percentage incidence of dementia paralytica in the 402 male cases, and the other is the same percentage incidence in cases other than paralytic dementia?—Yes, quite so.

2072. What argument do you adduce from the relative positions of those two curves?—I argue that, owing to these people having had syphilis, disease of the arterial system occurs more frequently and at an earlier age than in the normal population. That quite agrees with the evidence of the Wassermann reaction, which we shall discuss later, because the incidence of the Wassermann reaction in the general asylum population, apart from paralytic dementia is low; whereas in regard to paralytic dementia it is practically in every case. It is a little difficult to grade the degree of atheroma, because I have had three pathologists assisting me during the period that these statistics were made, during the last 13 years, and their ideas may differ a little as to the degree of atheroma; still they show, for all pathological purposes, those points.

2073. Studying these figures from the point of view of the relative incidence of the disease in the male and female sexes, what do you derive from them?—If I understand your question rightly, you mean why should women be affected less frequently than men?

2074. Yes?—I think the proportion of women affected by dementia paralytica is evidence of the proportion of individuals of the community infected by syphilis, and, seeing we find that as you rise in the social scale dementia paralytica becomes less and less frequent among females, and as you descend in the social scale it becomes more and more frequent, it supports the statement I made just now, that a considerable number of these women were probably prostitutes or were more liable to become infected than those of the middle and upper classes. Apparently, also, treatment might come in as an important preventive measure.

2075. Looking back for a moment to the table showing the percentage incidence of male dementia paralytica in various parishes, the difference in the

percentage in different districts seems to be very great?—Yes, it is.

2076. At the top stands St. George's, West, with a percentage incidence of 29, and at the bottom is Bethnal Green with 4·8. That is an enormous difference, is it not?—I think you can put some value on that. But the figures are small and therefore I prefer to lump them together into areas rather than to take these separate parishes. Such a difference as that between Bethnal Green and St. George's in the West is so striking that I think some deductions can be made from it. Bethnal Green has a poor industrial population, and I do not think there is such a great amount of degraded poverty there. I think it is amongst degraded poverty that you get the incidence of syphilis more marked than you do with industrial poverty. Reading Booth's "Life and Labour of the People," one comes to that conclusion.

2077. Upon the whole you think the parish is too small to enable us to form any opinion?—Yes, because, if you notice, Whitechapel is pretty high.

2078. Yes, Whitechapel stands second, I see?—I made enquiries about that, and I was told there are Salvation Army Barracks there and other institutions where people of that kind might be taken in. And then, of course, there is a large alien population, and the male Jew is very subject to general paralysis.

2079. Very subject, do you say?—Yes, quite. All the insane Jews are admitted to Colney Hatch Asylum, and I found there that the incidence of dementia paralytica among Jews was as high as the average for the general male Christian population.

2080. Does that mean the Jew is rather specially liable to the disease?—No, I do not think so. In other countries they are less liable to general paralysis than the average population, I believe.

2081. But in this country you think they come up to the general average, or approach it?—Yes, they do.

2082. You refer also to the Lunacy Commissioners' Report for 1913, showing the yearly average of paralytics among the direct admissions in England and Wales during the five years, 1907 to 1911. From that table you get, in the case of males, 13·3 per cent. of the private class suffering from dementia paralytica, and only 12·7 of the pauper class. In the case of females the percentage is reversed, 1 of the private class as against 2·3 of the pauper class. You say that accords with experience?—Yes.

2083. What do you deduce from that?—I have already said that as you rise in the social scale so dementia paralytica becomes less frequent among females. But it does not become less frequent among males; it is just as high as amongst lower-class females. We know that from experience. A very eminent physician asked me the other day whether females did suffer from general paralysis as, he had never seen a case.

2084. Then that is not to be taken to mean there is greater prevalence of syphilis among females in the lower classes than among males in the higher classes?—No; it is merely relative to the same sex; that is all. I think treatment ought also to be taken into consideration; that the poorer the individual the less likely they would be to be adequately treated.

2085. I suppose that is an important factor?—Yes.

2086. The further you go down the smaller the probability of cure, and you would expect a higher comparative incidence?—Yes.

2087. You have told us that the pathogenesis of tabes agrees with that of dementia paralytica, and you say that is confirmed by a large experience of practice in hospitals, asylums and infirmaries?—Yes. Some time ago I wrote a long article on tabes and locomotor ataxy in hospital and asylum practice, and I visited a great number of the infirmaries to ascertain if they had cases of tabes. I was quite surprised at the number of female cases of tabes I found bedridden in infirmaries. We do not see many of them in hospital practice because they become helpless and they have to go to the infirmaries; but they were quite numerous.

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2088. Turning to the question of hereditary pre-disposition to dementia paralytica, you are convinced, I think, that it is relatively unimportant?—Yes, I think it is unimportant. I say that because I have, during the last four years, made investigations in regard to all the people who are related to one another in the London County Asylums, or who have been admitted to or died in those institutions. We have now a card system and these cards now mount up to 3,600. In analysing the forms of insanity recorded thereon, I was particularly struck by the fact that dementia paralytica did not occur very frequently amongst the cards in this card system.

2089. Then, apparently, dementia paralytica does not transmit itself necessarily to a child?—No. I have often been consulted on that point, as to whether the child of a general paralytic would be likely to inherit insanity or transmit insanity to his offspring, and I generally say that, unless there is any other evidence of insanity in the family, or of epilepsy, I would say it would not be so.

2090. But, apparently, a man who had syphilis and afterwards developed dementia paralytica as the result of syphilis could transmit to his child all sorts of evil conditions?—He could transmit congenital syphilis; but at the time he was suffering from general paralysis he probably would not be infective, because the average time is 10 years after.

2091. You tell us that 2 per cent. of the cases of dementia paralytica are due to congenital syphilis?—Yes.

2092. Do you mean that in all other cases it is due to acquired syphilis?—Yes; I estimated that we had 10 cases of the juvenile form of general paralysis in 500 cases dying in the asylum.

2093. There is no distinction, of course, in your lunatic asylum tables between congenital and acquired syphilis?—No, they do not make any distinction. We make a distinction in the pathological reports. I always register it as juvenile general paralysis.

2094. May we take it that that 2 per cent. is the whole of the congenital proportion?—Yes, I think so. It would be very much more if it were not for the fact that the majority of children whose brains become infected by the organism, die in early life of meningitis, or hydrocephalus, or convulsions, or are born dead. That is a high percentage.

2095. Then, broadly speaking, you tell us that dementia paralytica is a late manifestation?—Yes.

2096. And you say it is due, generally, to acquired syphilis, and that the symptoms do not arise in the child until 10 or 15 years after birth, or even later than that?—Yes; I have known cases occurring at 28 or 30 years of age from congenital syphilis.

2097. In regard to the sexes, I understand you to say that they are equally liable where syphilis is congenital?—Yes.

2098. Therefore, you would not expect any difference to arise?—No.

2099. Your experience, you say, is based on 60 cases. Will you tell us about them?—Yes. I was interested in determining whether syphilis was the sole cause of general paralysis, as formerly it was associated with alcoholism, sexual excesses and mental stress in fact, syphilis was not mentioned in the reports when I was appointed. But I happened to be called in to see a case at Colney Hatch Asylum of a boy who was dying of dementia paralytica, and I recognised in him a case of congenital syphilis which I had treated in the course of my hospital experience 8 years before. That led me to think that probably one could collect a number of cases of congenital syphilitics suffering with dementia paralytica, and I was soon able to collect a large number of cases, which has increased to 60. All those cases went to show either that there was a definite history of congenital syphilis, by the fact that there was a maternal history of miscarriages, still births, children dying in infancy, convulsions, meningitis and so on, or there were signs on the body of congenital syphilis, or one could not exclude congenital syphilis from the history. Therefore, one came to the conclusion that this disease was a syphilitic disease, an organic disease of the brain due to syphilis. But, of course, it had

been shown experimentally by Krafft-Ebing that cases which were thought not to be syphilitic because there were no signs on the body and no history of syphilis, were incapable of infection. He inoculated nine people suffering with this disease with the virus of a hard chancre, and not one of them was capable of infection. He, therefore, concluded that they were all immune because the organism was still in the body. Really that clinched the argument that syphilis was the essential cause of general paralysis.

2100. Then in all these 60 cases to which you allude, the other causes to which dementia paralytica has been attributed were absent?—Yes.

2101. You deduce from that, that in all these cases syphilis was the cause of dementia paralytica?—Yes; I think where there is no syphilis there will be no dementia paralytica, and no tabes. That has been my position always.

2102. (*Sir Almeric FitzRoy.*) Where were those cases from?—Krafft-Ebing related those cases at Moscow at the International Medical Congress.

2103. Were these Austrian cases, then?—Yes, I suppose they were from Vienna.

2104. (*Sir John Collie.*) What nationality is he?—He is an Austrian. He is dead. He was pretty sure about it.

2105. (*Chairman.*) Then you allude to the large number of early deaths from meningitis and hydrocephalus which, to some extent, blinds the observation of syphilis?—Yes.

2106. A very large number of those early deaths are attributed to syphilis, or ought to be attributed to syphilis?—Yes, ought to be attributed to syphilis.

2107. Whereas, it is only in the case of those who live to a later age that it can be recognised and classed as syphilis?—Yes, I think if you have a history such as these figures show of premature births, still births, and of children dying in early infancy, and you were to have a Wassermann reaction performed you would find, in nearly every case, a positive reaction which would prove the absolute existence of syphilis, although the mother might tell you that she never had a day's illness in her life.

2108. These six diagrams you give us seem to bring out the effect of congenital infection most startlingly. Look at No. 1. There are apparently two healthy children, and, then, directly after the husband has been affected, comes a whole string of children who die in one way or another?—Yes, quite so.

2109. That is very striking, is it not?—Very striking, but that is the usual thing. I have put these four in because I wanted to show that the woman could produce healthy children until she was infected by her husband. In other cases it might be said it was some fault of the woman's reproductive organs which prevented her producing healthy children. But in these four cases she produced healthy children; then she was infected by her husband, and then came the result of that.

2110. These diagrams are very striking. I suppose investigation would bring out a large number of female cases in every respect analogous to this?—Yes, I have many others similar to this, but I only put these four down because they belong to a group of cases.

2111. In the fifth case you give us a somewhat different history. There you get infection of the husband just after marriage?—No, that is a mistake. It should have meant that the wife was infected after marriage by the husband; it is put just after marriage; it means the wife was infected just after marriage. The husband infected the wife.

2112. Then in this last case the wife was infected by the husband just after marriage; the result of that is two children, both of whom die early. Then the husband is treated—both are treated, I suppose, with mercury?—Yes.

2113. With the result that there are more or less healthy children born—normal children?—Yes.

2114. Then the treatment is stopped, and you get three cases of diseased children?—Yes.

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2115. That is very striking, is it not?—It is. The practitioner who sent this case to me attended the woman, and he told me he treated her for a time.

2116. (*Sir Malcolm Morris.*) Were those last three cases proved by the Wassermann reaction?—No, it was before the Wassermann was introduced. But they were so distinct that there was no doubt about them at all. They improved very much on treatment.

2117. (*Chairman.*) In this particular case the treatment was mercurial only?—Yes, only mercury.

2118. What one deduces from that is that the mercurial treatment, which must have been carried on for three or four years and then stopped, brings back the old conditions?—It evidently had not cured the woman completely. It only shows the necessity of periodic treatment in such cases.

2119. This other diagram, No. 6, dealing with passing on the degenerations, is rather remarkable?—Yes. Of course, in that case I saw the husband and I could make out nothing in him to show that he had syphilis, and the woman herself was a most typically congenital syphilitic. Knowing as we do now, that the syphilitic organism is in the body, it is quite possible it may have been transmitted to the third generation; it is a very rare condition.

2120. In this particular case, No. 6, of the first two parents, one of them was syphilitic?—They both must have been syphilitic, because I do not think the children can become syphilitic without the mother being syphilitic. She might not have shown syphilis, but it was latent in her. I saw the mother of the first generation; she told me that she had never had a day's illness in her life; but I have not the slightest doubt she would have given a positive Wassermann reaction. I have had two cases lately, both of them typical congenital syphilitic cases; there was dementia paralytica in one, and optic atrophy, with locomotor ataxy and dementia paralytica in the other. I asked the mothers if they would object to having their blood tested; they said, No. I tested their blood and in both instances it gave a positive reaction in all dilutions, although these women had not suffered at all and did not know they had anything the matter with them, but they showed they had by the fact that it had been transmitted to their offspring.

2121. In this particular case there were three apparently healthy children. I suppose you do not know whether those children married and had children?—I do not know; it is possible that the husband may have infected the wife afterwards, but that I cannot say.

2122. At all events, after the three healthy children, they produced two syphilitic children?—Yes.

2123. And one of those syphilitic children married a healthy husband?—Yes.

2124. There is no doubt about the health of the husband; but in that case they produced a syphilitic child which died in infancy?—Yes.

2125. That proves it can come out in the second generation?—It does. These cases are very rare, and of course the people would say: "We are not sure about the husband." But I feel pretty confident he was not really infected and, knowing as we do now, that the syphilitic organism may be actually found in the ovaries, it is quite possible that the syphilitic organism was in the ovary of the mother of this syphilitic child.

2126. I see from the diagram that the mother of this last child is marked with it?—Yes, she had all the signs of typical congenital syphilis such as Hutchinsonian teeth, rhagades round the mouth, keratitis, and everything one would expect.

2127. I suppose any woman in that state would probably produce a child who had some disease, or something wrong with it?—Yes, I should think probably so.

2128. Then you do not say absolutely it is necessarily transmitted in the second generation?—No, I do not say necessarily.

2129. But you think there is a strong probability?—Yes, I do.

2130. And if it were to the second generation, why not to the third?—I suppose a certain amount of immunity would occur after a time.

2131. You have treated congenital syphilis at length in the Proceedings of the Royal Society of Medicine?—Yes.

2132. How long ago was that?—That was when the discussion on syphilis took place. I opened the discussion on congenital syphilis.

2133. (*Sir Malcolm Morris.*) 1912?—1912.

2134. (*Chairman.*) Then you have come to the conclusion, or you think it probable, that the syphilitic organism in the production of dementia paralytica and tabes may be the same but modified or attenuated?—Yes.

2135. What does that mean exactly?—The fact that it occurs such a long time after infection, the average time being 10 years, and secondly that as a rule (and this a fact pointed out by Fournier, and has been emphasised by everybody who has investigated the question since) the primary sore and the secondary manifestations are very mild in these cases. You seldom see obvious skin lesions or gummata in cases of dementia paralytica and tabes, and that rather points to a modified virus. It is known that in certain countries where syphilis is very rife, for example, in Asia Minor, where an outbreak of syphilis occurred which was investigated by Van Dühring, and the whole of the population was syphilised, they did not find any cases of dementia paralytica or tabes, nor is it to be found much in Bosnia. Colonel Lambkin has pointed out recently that nearly the whole of the races in Uganda have been syphilised, and yet these two diseases are not met with. Of course it may be a question of the difficulty of diagnosis. For instance, they did say there was no dementia paralytica in the asylums in Cairo, but since Dr. Wornock was the superintendent there, they have found about 6 per cent. Still, I cannot help thinking there is a tendency amongst syphilised races to these forms of late manifestations of syphilis. Krafft-Ebing looked upon dementia paralytica as a result of syphilisation and civilisation. Whether his definition is true or not I do not know, but certainly it does seem to be much more common amongst civilised races. I was talking to Sir Charles Lukis the other day, and he said he had had a large experience of asylum practice in India, but he had seen very few cases of dementia paralytica in asylums. I have been told the same thing by many other doctors who have had experience in India, so that possibly it may be true. It was said they had not it in Japan; but in Japan now with better diagnosticians, they find they have a pretty considerable percentage of these cases. But another aspect of the question may be taken, that is, whether a race where syphilis has been widespread, and where the people have been treated with mercury, may not have acquired a modification of the virus through the mercurialisation, in fact that is the opinion of Neisser, who is a great authority on the subject: that a widespread use of mercury may have modified the virus, so that the organism itself has taken on a new habit of getting into the nervous system where it is protected against these drugs. Neither mercury nor arsenic will pass into the substance of the nervous system, and therefore that makes a great difficulty in eradicating the disease by the use of arsenic and mercury.

2136. You mean a long course of mercury might be met by the bacillus manifesting itself in other ways—in accommodating itself to the larger access of mercury into the system?—Yes, accommodating itself. I do not know whether I shall be discursive in these matters, but the experiments of Ehrlich are very interesting in that respect. He found if he treated animals which had been infected with trypanosomes with arsenic, after a time the animals recovered, and the trypanosome disappeared from the blood. The animals put on flesh, the hair came back, and so on. But after a time a few trypanosomes came back. Then the blood swarmed with trypanosome, and any amount of arsenic had no effect upon those trypanosomes. They were what he termed arsenic-fast. It is possible by analogy the specific organisms of syphilis may become mercury-fast, that is to say, the organisms have somehow adapted themselves to the mercury or got away into

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the tissues where the mercury will not act upon them, so that they are immune to the drug.

2137. Is it probable that salvarsan will in the same way cease to be effective as the years go on—the bacilli will accommodate themselves to the salvarsan?—I do not think that; because I think the hopeful part of the salvarsan treatment may be this, that salvarsan will rapidly destroy the organisms, whereas mercury takes time, and if the sore is diagnosed straight away as containing the specific organism of syphilis—and it can be diagnosed in almost every case by the use of the microscope—then if salvarsan is injected into the blood it will stop the generalisation of the organism, and the possible infection of the nervous system, I believe, just in the same way as it does in the case of the skin when an eruption comes out, there may be an eruption in the nervous system, and once the infecting organism gets there it is difficult to get rid of it.

2138. In the case of patients suffering from demetia paralytica or tabes, I suppose no organism is ever discovered?—Yes.

2139. Invariably?—I have been finding the spirochaete in more than half the cases of dementia paralytica recently.

2140. Where do you find it?—In the brain.

2141. It can only be discovered after death?—No, it has been taken out during life, because there were two cases in Germany where, for diagnostic purposes, they made a small hole in the skull and took out a small piece of brain where they expected the organisms might be found, and they were found living in the tissue; so that it is not merely in the dead tissue, but it is found in the living tissue. That is quite a harmless operation; it is done for the diagnosis of tumours; it is a simple thing practically.

2142. Does a post-mortem examination establish the fact that the spirochaete is always in the brain?—I have now examined about 30 cases since Noguchi discovered it. Noguchi, the Japanese, discovered it. He had been looking through a lot of badly stained specimens Dr. Moore had made when he came across one which showed the organisms, then he went back to them and went through them again and found them in 12 out of 70. Since then he has found them in 25 per cent. of the cases. But if you take the brains of people who have died of paralytic seizures, that is to say, they have had convulsions just before death, you will find them practically in nearly every case, and I look upon that as rather an important matter. It seems to indicate that the multiplication of the spirochaetes produces a poison which causes irritation, fits, and loss of consciousness, and consequently the succession of developments of that nature leads to decay of the brain structures; and if you examine those structures of the brain where the wasting is most marked, namely, the frontal lobes, you will find these organisms. You can see them on the dark ground microscope, or by the Indian ink method, they have the same appearance as those which can be seen in the scraping of a chancre.

2143. To what extent is the discovery of the spirochaete useful in diagnosing the earlier stages of syphilis?—I think it is most valuable. If you will remember, I asked Colonel Scott when he gave evidence, whether they made any distinction between soft sores and hard sores, and how they would diagnose the disease. He said that in the case of the soft sore it was difficult simply from appearances to determine whether it was syphilis or not, but they always examined for the treponeme, and if they found it—that is the specific organism of syphilis—after several trials, and they would find it if it were there, then they immediately began treatment.

2144. Then a microscope can supplement the Wassermann test to a very important extent?—It is more useful than the Wassermann test, because you can get a result before the Wassermann test can be applied. The Wassermann test can only be applied when the generalisation has taken place. Therefore, that is the essential point, I think, in the treatment of syphilis, to find the organism at the earliest possible period, and immediately begin treatment.

2145. The organism is perfectly distinctive?—Absolutely. I have brought down a book which shows a photograph of the organism. It is just the same thing in the brain. (*The witness showed the illustration in the book to the Chairman and the Committee.*)

2146. You allude in your paper to 34 cases of syphilitic mothers that you investigated?—Yes.

2147. And they were all due, you say, to congenital syphilis?—They were all due to congenital syphilis. Of course one case of congenital syphilis was the means by which I investigated that particular family. You observe the enormous proportion of infant mortality produced.

2148. You say the result of these conceptions from a syphilitic mother are abortions, still births, and children dying in infancy from convulsions, meningitis, and hydrocephalus. All those can be distinctly ascribed to a syphilitic mother?—Yes.

2149. Then it is among deaths of the children by disease that one could find, if analysed, the prevalence of syphilis in this country?—I think so most decidedly.

2150. In these statistics you say “the fact that in every instance one of the children is suffering from the effects of congenital syphilis must be taken into consideration.” What do you mean by that?—I mean this, that we start with that number of cases. I mean to say we might get families where there was a doubtful history of congenital syphilis, and find the same history. But here we have 34 cases where there was undoubted syphilitic manifestations in the child which led to the investigations of that particular family.

2151. The table shows us that of 22 married females suffering with tabes, or tabo-paralytic dementia, seven were sterile altogether; ten children were born alive; ten died in infancy; 18 were born dead, and there were 81 miscarriages or premature births?—Yes.

2152. Making in all 49 who, in one way or another, were evidently affected?—49 deaths.

2153. Besides the others?—Yes.

2154. That is a tremendous proportion?—Yes. It shows really that when the mother is infected, practically very few healthy children are born.

2155. Then out of the 54 married males who were suffering from those two diseases, there were 151 children remained alive; 75 died in infancy but were born alive, and 52 were born dead, or miscarried, or premature births. That looks as if the proportion was considerably less in the case of an infected man than in the case of an infected mother?—Yes, very much less. It means this, that the men have not infected their wives in the majority of instances. If every man who suffered from syphilis infected his wife, we should have an enormous proportion, because there is a much greater proportion of males infected than females.

2156. (*Canon Horsley.*) Is it possible for a man to have the disease and not communicate it?—After a certain number of years the only proof that a man is cured of the disease is the possibility of re-infection, and that is very rare. There are a number of men who have the syphilitic organism in their body, but who will not transmit the disease.

2157. (*Chairman.*) You say 10 to 15 per cent. of married women in England are childless?—Yes, that was based on the statement of Sir Spencer Wells many years ago. I think it is a larger proportion now, but 35 per cent. of these paralytic demented women are childless; so that sterility comes in very much. But then it may be that the sterility is due to that adhesive inflammation of the oviducts, which I have shown you is so common.

2158. That 10 or 15 per cent., or whatever the number may be now, may probably be accounted for by syphilitic or gonorrhœal disease?—Yes, it might be. Of course one does not know how far restriction of birth comes in now. It is much more important than ten years ago when I made that statement.

2159. Then as to the reasons why statistics relating to the production of various diseases due to syphilis are very difficult to obtain in this country, as we all know, will you explain the general causes?—The reason is this. I find so many of the cases I investi-

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gated were, perhaps, treated for the primary sore and secondary symptoms at the Lock Hospital, and then they drifted from there and suffered with some eye disease, say, and were treated at an eye hospital, or at a general hospital, suffering from some nervous disease, or they got into the infirmary or asylum. But there is no correlation between the different hospitals in London. In a town where the hospital consists of a number of units, for instance, the Johns Hopkins at Baltimore, which seems to me to be a perfect system, each unit is a part of the hospital, and the whole is unified as it were, and each unit is brought in relation to the other unit, so that if a person suffers from syphilis and is treated in the surgical department, when he goes to the skin department protocols are handed on, so that there is a complete system; and in places like Helsingfors in Finland, where some valuable statistics were obtained, that system holds, so that they can get out results which we cannot in London, for reasons I have mentioned.

2160. It is the specialisation of hospitals which really hides that to some extent, or makes it difficult to get out?—It makes it very difficult to get statistics. I do not suppose Mr. Lane sees the nervous cases very often at the Lock Hospital. They drift away to the hospitals where they treat nervous diseases and so on.

2161. Are foreign statistics better than ours?—Yes, for that reason they are very much better.

2162. Is it usual in foreign countries to have the whole of the branches of the hospital under one head?—In some places it is, because it is a State service.

2163. (*Mr. Arthur Newsholme.*) The John Hopkins is not?—No, that is not State service. Still, there is a system.

2164. (*Chairman.*) What has your research showed you as regards the pathology of syphilis in the nervous system and the arteries?—It has shown me that syphilis is a very important cause of arterial disease, especially of arterial sclerosis, and disease of the vessels of the nervous system, causing a condition called endarteritis, which is particularly liable to lead to softening of the brain owing to the corrosion, if I may put it in that way as it will be better understood, of the lining of the artery, and clotting of blood thereby, is very liable to take place in it. Thrombosis, or clotting of the blood, takes place in the artery; a portion of the brain or nervous system is cut off from the blood supply, and softening occurs. So that softening of the brain and paralysis as a result of softening, is very frequently due to syphilis.

2165. It is probable, as research is carried further and deeper, that still other diseases will be found traceable to this source?—Yes, I should think so. Gummatous meningitis, and a certain number of tumours of the nervous system are caused by it, and disease of the vessels of the body generally.

2166. Then the discovery of this specific organism was a very important one?—Yes, one of the most important discoveries in medicine.

2167. And by means of that organism the disease can be produced in animals?—Yes.

2168. Does it take the same general forms?—The nearer the animal is to man, the more like the disease is. So that Metchnikoff, who first succeeded in inoculating animals and used anthropoid apes, reproduced a disease in anthropoid apes, which corresponded very closely to that in man. But it can be transmitted to rabbits and other animals for experimental purposes.

2169. Is it difficult to cultivate?—No; it is difficult to cultivate outside the body. It has been cultivated, but it is an anaerobic organism; that is to say, it grows best when there is no air present, and that may have an important bearing.

2170. It has not been cultivated with a view to making a serum like the plague one for example?—No, it has not.

2171. Is there any possibility of anything being done in that way?—I suppose a vaccine might be made.

2172. You have taken a very large number of Wassermann reactions?—Yes.

2173. We have heard a great deal about the Wassermann reaction. I think we all know the

general *modus operandi*; but I want to ask you whether it requires great skill and special training to carry it out?—It requires special training, but I do not think it requires great skill. I think you could get a technician if he were properly trained, and an intelligent man, to do it quite well; but it would have to be under the direction of somebody who knew how to do it.

2174. Then you do not really want a highly trained doctor to carry this out?—No; provided there was a director of the institute to see that the things were carried out properly.

2175. Does it require any expensive appliances?—No, it is not expensive. You require a licence for vivisection, because you must produce a serum; and you produce that by injecting into rabbits the blood of an ox or a sheep several times in order to prepare the haemolytic serum necessary for the test.

2176. Does it take a very long time to make one of these tests?—No; it takes about half a day to do it, but of course you can do a hundred at a time.

2177. You say, in the pathological laboratory of the London County Asylums, since the 1st March 1911, over 2,500 specimens have been examined?—Yes.

2178. Of those, 590 were specimens of cerebro-spinal fluid withdrawn during life?—Yes.

2179. 1,387 were serum taken during life?—Yes.

2180. 239 were cerebro-spinal fluid removed after death and 221 were serum removed after death?—Practically yes, because we were able to put the bodies into the cold chamber. If decomposition takes place I should be doubtful of the results, because we found a negative reaction becoming positive, and a positive becoming negative owing to some organism growing in the blood. But if the bodies are put into the cold chamber, as they are in every case at Claybury, then that stops decomposition, and the results are reliable.

2181. Then you would not altogether accept the figures given by Dr. Ham from the Children's Hospital?—No, not altogether. I was rather surprised to hear that he should have got histological evidence in such a high proportion of the cases.

2182. Unless the blood was at once put into a cold chamber, there might be some error?—Unless the body was placed in a cold chamber.

2183. You say that in cases in which the Wassermann reaction was applied, it gave positive reaction on the cerebro-spinal fluid in 97.9 per cent. of cases of paralytica dementia?—Yes, that is so.

2184. Only four cases out of a total of 195 failed to give the reaction?—Yes.

2185. That is conclusive, I suppose?—Absolutely conclusive. I think one thing I would like to mention is this. Some people have got a little different results. I think it is necessary to use a sufficient quantity of cerebro-spinal fluid, not less than .08 cubic centimetres, otherwise you may get a negative result. Then also we always found the cell reaction, lymphocytosis of the fluid in these cases.

2186. In all these cases the diagnosis was verified?—Yes, by post-mortem examination.

2187. Then dealing with serum, you got 97.8 per cent. with practically the same result?—Yes, practically the same. I may say these results accord completely with those of Plaut, who is a very eminent authority; he first applied the reaction to the cerebrospinal fluid.

2188. Your experiments show that the cerebro-spinal fluid gave a more intense reaction than the serum?—Yes, comparatively.

2189. You say from twice to ten times that of the ventricular fluid?—That point requires a little explanation as to the fluid. The reason of that is this. I had the idea that there must be some correlation between the multiplication of the spirochaetes in the brain substance and this Wassermann reaction of the cerebro-spinal fluid. The cerebro-spinal fluid is secreted by a plexus of vessels in the ventricles of the brain, and if we could get the fluid as it is secreted, it is possible we should not find any Wassermann reaction at all. But after it has been in contact

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with the tissues where the spirochaetes are, it then gives the reaction, and that is the meaning of the reaction of the fluid of the ventricles of the brain giving a much less reaction than the fluid obtained by a lumbar puncture—that is, the fluid which has been in contact with the diseased nerve tissues, and the spirochaetes which are producing the disease.

2190. You have given us a table of cases other than paralytica dementia. Those were cases of imbecility in various forms?—The diagnosis of cases of insanity depends very much on the personal equation. I would not like to say what they were. The 400 cases had been in the asylum a very long time. I daresay some of those cases I would not call imbecility.

2191. These were promiscuous cases in the asylums who had not paralytica dementia?—Yes. This is a sort of control; we are having now, a series of cases taken of all admissions without distinction, and those will be more valuable, I think.

2192. In that case you did not discover very much?—No, I would not put much reliance on that, except to show that other forms of insanity only give the incidence possibly that the outside population would give. There is a very striking difference between 7 per cent. and 97 per cent.

2193. From the 1st January 1913 to the 30th of November last, the Wassermann reactions have been applied to the blood of all consecutive male admissions? Yes, that is at one asylum, Cane Hill.

2194. In that case out of all the consecutive male admissions you got 33·5 per cent. positive reaction?—Yes.

2195. That is very high?—Yes, it is very high; but then of course there is a large proportion of paralytics coming in who practically give a positive reaction in every case.

2196. But you exclude them in the other figures you give, and, excluding paralytics, you still get 16·4 per cent?—Yes.

2197. That is high?—Yes, it is high, and I may say that we take half a test-tube full of blood from the veins in every case. We do not rely upon pricking the ear or pricking the finger; I do not think that is satisfactory.

2198. Then do you think it may be argued from that, that that incidence represents about what happens?—I should not like to make a statement on a small number like this. We are now doing this at other asylums, and I have made arrangements with Dr. Fisher, of the Shoreditch Infirmary, to examine for a Wassermann reaction all admissions to that infirmary so that we shall have some figures to go on later to show the incidence.

2199. Shall we have any figures in time to be of use to us?—Yes, we are getting 50 a week.

2200. Shall we have enough figures, do you think, to settle that proportion?—I think so.

2201. That is to say, we could lay down to what extent, various forms of madness in this country are due to syphilis?—I would not like to say that this proves that they are due to syphilis. There are lots of people who have syphilis, but the insanity they are suffering from is not due to syphilis. That is a coincidence.

2202. But all these who are tested by the Wassermann test and give reaction?—Yes, but I would not say that. A person might have epilepsy and get syphilis. The syphilis has nothing to do with his epilepsy, or a man might be a son of a paranoiac man with delusional insanity. I would say if he had delusional insanity the syphilis had nothing to do with it. But if he had softening of the brain, that is to say, an organic dementia, then I would say syphilis is the cause of it. That is why I think it so important to associate the diagnosis with this Wassermann reaction. We must separate coincidence from cause.

2203. You have dealt with 60 cases of brain syphilis collected in your hospital and asylum practice 15 years ago?—Yes.

2204. And you learnt from that several things?—Yes.

2205. In the first place the character of the primary sore?—Yes, I found a good number of those cases were

diagnosed as soft sore and not treated. Of course, that brings back the point of the importance of the diagnosis of the disease in the very first stage during the primary infection, because a great many of those cases afterwards developed a severe form of nervous disease from which they did not recover even with treatment.

2206. It may take hold of the brain, although it has not manifested itself in outward and visible forms on the body?—Yes.

2207. You say that many of those cases died?—A very considerable number have died. Some of those that I thought had recovered have died. They relapsed. You think you have cured them, and they relapse. Perhaps they have been paralysed down one side, and they have recovered movement on that side, then afterwards, they have been paralysed on the other side, or they have developed some other form of paralysis. But very often I think that was due to the fact that patients would think they were cured and not come back for treatment. Now, of course, when we have the Wassermann reaction, we should say to those people who have a serious nervous disease of that sort, "You must come up periodically to have your blood tested in order to see whether it is necessary for you to have another course of treatment."

2208. When the disease has got so far as to take the form of tabes or dementia paralytica, has salvarsan any effect at that stage?—So far I do not think the results are very satisfactory with regard to the treatment of dementia paralytica. The cases of tabes have certainly improved both with mercurial treatment and with the salvarsan treatment. But a new form of treatment has recently been adopted based on good scientific principles, namely, to inject into the blood the salvarsan until the reaction becomes negative, and then to draw off some of the blood from that person, take the serum, and inject the serum direct into the cerebro-spinal cavity; so that the anti bodies which are supposed to be curative in the system may act on the spirochaetes, the specific organism of syphilis, and either stop its growth or destroy it. It certainly seems to me to be a hopeful line of treatment, and it was particularly praised by Professor Erlich when he was over here, because he thought some valuable results might come out of it. Of course it is more or less in the experimental stage. You cannot put the salvarsan direct into the cerebro-spinal cavity, because you will kill the patient; but you can put this serum, which does not contain any neo-salvarsan, but contains the anti bodies, into the spinal cavity without hurting the patient at all. They claim at the Rockefeller Institute certainly to have arrested the disease, and they have proved it in a remarkable manner in a number of instances. But of course the difficulty of dementia paralytica is that the organism is not in the spinal cord; it is in the brain, and, being in the brain, then probably an injection by lumbar puncture will not come in contact with the surface of the brain at all. Because if you inject animals with a dye, the dye does not come to the surface of the brain at all; it only stains the base of the brain and the spinal cord. If you put it through the skull direct, then the dye stains the whole of the surface of the brain; so that possibly if they injected direct into the cranial cavity so that the serum came in contact with the surface of the brain, useful results might follow. That is quite in the experimental stage at present.

2209. Then you have arrived at strong conclusions as to the pathological differences between syphilis of the nervous system and of the membranes?—Yes. When the generalisation of the organism occurs in the system, as I said before, it is quite probable that infection of the membranes, that is, the coverings of the brain and the spinal cord, may take place; an eruption may occur on the membranes. That this is probably the case has been shown by the fact that by lumbar puncture, and drawing off the cerebro-spinal fluid, when the eruption occurs it is shown that a lymphocytosis in a considerable number of cases, and that lymphocytosis occurs is the reaction to the specific organism, so that the infection may occur then. I had a case once which was treated as a soft sore at the Lock Hospital, and it came on to Charing Cross

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Hospital suffering from signs of meningitis. He was treated with iodoform, and under treatment he recovered completely. There was no doubt about it that the organism had then invaded the membranes of the brain. At the time a roseolar rash came out. I do not think that is very frequent at the Lock Hospital; I am sure it is not now. It was many years ago. Still, it was a striking case, because there was a case where an infection of membranes occurred while the primary sore was yet unhealed. It was once thought that these serious diseases of the membranes and vessels of the brain were a manifestation of a late tertiary condition. As a matter of fact the worst cases occur quite early, and the greater number occur in the first two years after infection, and diminish with each succeeding year.

2210. I understand that you want to abolish the term parasyphilis?—Yes.

2211. And to substitute the term parenchymatous syphilis. What is the difference?—Parasyphilis means a post-syphilitic infection as if the organism had nothing more to do with it, and until we found organisms in the brain it was generally believed that general paralysis was parasyphilitic. It is the name given by Fournier. The Germans called it metasyphilis, which is the same thing. But now we find the organism still in the brain, it is better to speak of it as parenchymatous syphilis. If we adopt the term parasyphilis, we say "This is the result of syphilis, a decay of the nervous system has set in, therefore we can do no more in the way of treatment." But if we look upon it as still due to the effect of the organism, there is some hope of treatment yet.

2212. The latest and most modern view is that all these diseases are manifestations of the same organism working in different parts of the human body?—Yes, the same organism; but it is quite possible, as I said before, that there may be a modified organism which produces these diseases, and there are some remarkable instances given. May I mention them?

2213. If you please?—Seven glass blowers had a chancre of the lip. They were seen 10 years later, and four of those seven were suffering either from dementia paralytica or locomotor ataxy. They must all have been infected from the same source, namely, the tube of one man infected the whole of them with the chancre of the lip. There were five came under observation. That was related by Brosius. Another remarkable instance was a number of men who were infected by the same mistress. There were five men who had suffered with syphilitic brain disease, four of them with dementia paralytica. They all acquired the disease from one woman who was their mistress in succession. I know of a case myself where two doctors were infected by a nurse. Ten years afterwards both of them died of general paralysis. One could multiply these cases, which seems to show there is some relation with possibly a modified organism which produces this late form of the disease.

2214. Not one specific organism, but the organism may take several forms?—Yes. One finds that in other conditions like the trypanosome of sleeping sickness, for example, only an expert can tell the difference between that trypanosome and the trypanosome of tsetse fly disease. The one gets into the nervous system and produces sleeping sickness.

2215. (Dr. Newsholme.) With regard to the question of the amount of general paralysis as shown in the London County Asylums, I gather from your chart that since 1906 there has been no increase in the number of patients in proportion to the population of London in the asylums?—Do you mean of dementia paralytica?

2216. Yes?—No, there has not, practically.

2217. So that once you have got over the increasing number admitted in previous years, you have come to a practical level in the last six or seven years?—Yes, I should think so, and the death rate is almost parallel with the admission rate, is it not?

2218. That is so. As far as one can judge from the year 1906 onwards, general paralysis of the insane

in London has remained fairly stationary?—Yes, I should think so.

2219. But on the other hand, are not there certain other factors to be brought into the question? Is it not likely that from private asylums a good number of patients have been transferred to public asylums? The reports of the Lunacy Commissioners show a great deal of transfer from private asylums to public asylums. That is so, is it not?—Yes; but still it does not amount to a very, very large quantity. You are dealing with an immense population, 20,000. If you take all the Metropolitan Asylum Board's population, large asylums like Leavesden, Caterham, and Darenth, which make up the bulk of the 7,000 extra, there is not much.

2220. Has not there also been some transfer from workhouse infirmaries? In former years a great many insane people were kept in workhouses who are now transferred to lunacy asylums?—Are you speaking of paralytic dements?

2221. No?—I do not think they keep them. Mild cases of idiocy, and all those cases such as old people suffering from organic dementia, they would keep, but I think the paralytics would probably be sent on to the asylum.

2222. Then I take it there has also been some increase in the efficiency of diagnosis?—Yes. But that does not amount to very much, because, as I said before, it is about the easiest disease to diagnose that you can have. In 96 per cent. of the cases you get granulation of the fourth ventricle. All medical officers know that. When they see that, they put it down as general paralysis; so probably that possibility of error does not mean very much. I admit we have improved diagnosis on admission, about 25 per cent. with the Wassermann reaction.

2223. Taking all this information in the aggregate, and seeing that the curve of general paralysis is horizontal since 1906, the result is not inconsistent with the conclusion that general paralysis of the insane has not increased, but may have decreased in London?—I should say it has not increased; I should not say it has decreased. I see so many cases outside the asylums.

2224. Your opinion is as stated in your contribution to the Royal Society of Medicine, that so far as appertains to the general population, it is impossible in England to arrive at any definite conclusion regarding the prevalence of syphilitic infection?—Yes, I think so.

2225. You are still of that opinion, I take it?—Yes, I think this gives you some idea. If we knew what percentage of people infected by syphilis in a population like that of London suffered eventually from general paralysis—supposing we put it at 2 per cent.—then we should have some idea really of the incidence of syphilis; because the admission rate is about equal to the death rate, so that there is a steady flow every year.

2226. With regard to the amount of general paralysis in various parts of London, you have already said that you do not regard those proportions as necessarily representing the exact facts?—No, I do not. It is only an indication.

2227. Might I suggest to you it would be better if you could get the male and female populations for each of these divisions of London, and state the percentages in proportion to the population in those years, rather than to give the general paralysis of the insane in proportion to total insanity, which is the proportion between two variants. I think you would find it would make some difference in the proportions. It could easily be calculated. Take, for instance, the Strand Union. You see there that among males only 8.9 per cent. of the cases were G.P.I., whereas in St. George's 29 per cent. were?—But the Strand is very small. It is only 16,000. It is hardly worth considering.

2228. You think it is not worth considering?—No.

2229. Take again St. George's-in-the-West, 29 per cent., and Bethnal Green 4.8 per cent?—There they are about equal. Bethnal Green's population is 128,000.

2230. It might be there would be a great variation in the total insanity, and not in the G.P.I. If you

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take the proportion between the two you get a fallacious result?—But Bethnal Green is the lowest insanity rate too. That I can partially explain by the mode of certification, I think.

2231. I am suggesting to you that if you could possibly get the male and female populations in each of these divisions in London, it would be very much better to state each of these in ratio to population?—Yes, I suppose one could give that.

2232. I think it could be got. I was not able to do it before this meeting, or I would have handed it to you?—If you would add that, I should be most obliged. Of course all one can say is that it seems to show there is a much higher incidence in the West End, especially north of the Thames, among males, than in the East End, and higher among the females in the East End than the West End; and that would accord with experience which we know.

2233. I should like to ask you this general question. Have you any doubt at all as to syphilis being an infectious disease?—None whatever—a contagious disease.

2234. What distinction do you draw between "contagious" and "infectious"?—Direct contact.

2235. Take the case you were mentioning just now of the glass blowers. One infectious man, a man with some sore on his mouth blowing the glass, and another man who did not come in contact with the first person, but with the glass, becomes infected with syphilis?—Yes. It is more or less indirect contact and infection.

2236. Is it not practically the same?—Yes, practically the same?—Take small-pox, for example, or scarlet fever. What would you call that?

2237. That may be passed on from the air possibly?—That is what I mean.

2238. But more often not?—Yes, I should think more often not.

2239. Take the question of hydrophobia; that is introduced only by the bite of a dog, or through some sore place in the skin?—Yes.

2240. But you would have no doubt in calling that infectious?—No. I should call syphilis and gonorrhoea both infectious diseases.

2241. I asked the question for a very special reason. As you may be aware, the Local Government Board have power to make regulations with a view to the treatment of persons affected with infectious disease. Would you have any doubt as to that power, including such a disease as syphilis, from a medical point of view. I am not asking you a legal question?—I should not, from a medical point of view, but I think you would have a difficulty. It would raise questions.

(*Sir David Brynmor Jones*). What is the difference between the legal and the medical point of view?

(*Mr. Arthur Newsholme*.) I do not think there ought to be any difference at all. But as Dr. Mott seemed to be somewhat nervous on the point, I am asking him to confine himself to the medical aspect.

2242. You have no doubt at all that syphilis is an infectious disease?—Yes.

2243. In the sense that it is conveyed by indirect contact?—Yes, direct or indirect contact.

2244. Then with regard to the question of laboratory diagnosis of syphilis, you laid great stress on the direct examination of the sore?—Yes.

2245. And on finding the treponeme in the material?—Yes.

2246. Do you regard that as an indispensable thing in the prevention of the disease, if we are to undertake a successful campaign against the disease?—I think so. I think the army people have been quite right in laying great stress upon it.

2247. So that if you were advising measures calculated to conduce to the treatment and prevention of syphilis, you would regard the laboratory as an essential part of such measures?—Yes, I should.

2248. That you have no doubt at all of?—No doubt whatever.

2249. With regard to the question of congenital syphilis, you gave some very important figures showing the tremendous proportion of deaths from premature birth occurring from syphilitic parents?—Yes.

2250. But that of course gives a very much smaller idea of the total amount of congenital syphilis than if you could get data from a large number of persons?—Yes; but I mean to say as a matter of fact when we are taking histories in hospitals, we always ask that question, and if we find there has been a series of miscarriages, or one or two miscarriages, we always get a Wassermann done to see whether it was syphilis or not.

2251. Can you give us any idea of the total proportion of deaths from premature birth which are likely to be due to syphilis?—No.

2252. It is almost an impossibility, is it not?—It is absolutely impossible. I investigated these cases myself. I actually went to the houses and interviewed the women myself, so that I could get reliable data, and I was particularly struck by the fact of the importance of syphilis as a cause of infantile mortality.

2253. I would like to ask you a question bearing on what the probable future administration in relation to congenital syphilis is likely to be. Supposing a still birth or a premature birth is notified to a sanitary authority, and the health visitor is sent to the house and comes back with a history of several premature births in that family, it is a very important point in practical administration to know how one could proceed without damaging the family life of that family?—Yes, I admit that.

2254. Have you any suggestions to make on that point, or have you not thought about it?—I have thought of this. The women would probably be under the care of the panel doctor, would they not, or a very large number of them would be?

2255. In all probability, in the cases I am thinking of, neither the father nor mother would be openly ill?—No.

2256. And the subject would have to be broached either by the health officer or the doctor, to one of the two parents or to the panel doctor?—Of course, you could easily do this. An infant was sent to me the other day from Shoreditch Infirmary. It was born dead. I took the liver and found any number of spirochaetes in the liver of the child. I have no doubt about that being congenital syphilis.

2257. There the child was dead?—Yes, it was a dead child.

2258. Then you had good reason for tackling the father or mother, as the case might be?—Yes, I should say certainly, this is proof positive that the mother is suffering from syphilis.

2259. Supposing you told the mother she was suffering from syphilis, and she went home and informed her husband of that fact, and further enquiries which she made on her own account showed she had been infected by her husband, then divorce proceedings would quite likely follow. I have had several letters from ladies on this point, and they said this: "We placed ourselves in the hands of the doctor. It is the doctor's duty to tell us what we are suffering from. It is our business to find out how we got it. It is no business of his." Of course, it is a very difficult matter to decide from an ethical point of view.

2260. In that case would you inform that mother that the child died of syphilis; that is, you as the doctor at the hospital?—I do not know. It is a very difficult matter. You might do a great deal of harm by doing so. You might break up the family life.

2261. If you were in France, you would be absolutely precluded from doing so?—Yes. I think this. If you found a way of treating the mother without breaking up the family life, and found reasons for so doing: for instance, that the husband was a drunken good-for-nothing fellow, and he deserved all he got, then I think it would be quite justifiable.

2262. May I suggest to you a way out would be, if there was a family doctor, for you to communicate with the family doctor and get him to take the steps?—I am assuming I am the family doctor. I mean to say, every case must be judged on its merits, clearly. There might be reasons; it is regarded as cruelty in divorce. There might be very great difficulty.

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2263. Enormous difficulties are involved in the question of investigating the proportion of syphilis in new-born infants?—Very.

2264. It is a most important thing to take up?—Supposing there was a history of a woman having had a number of miscarriages and the panel doctor is called in, he has that information. When he attends her confinement he cuts the umbilical cord—he need not say anything about it to the mother; there is no operation—he just lets a little blood into tube, and sends it off to the laboratory to know whether there is a positive Wassermann. If there is a positive Wassermann, all he has to do is not to say so, but to treat the mother and the child.

2265. That brings us back to the essential position of a laboratory in the armamentarium for stopping syphilis?—Yes, absolutely. I think also the laboratory should be for scientific investigation.

2266. All the same, imagine in that case, as the result the Wassermann test, he tells the mother she must be treated and she does not want to be treated. She feels perfectly well?—Supposing he says to her “Those babies have died before, and this child will be very ill if it is not treated, and you will be very ill if you are not treated, therefore I advise you to have this injection.”

2267. Yes, thank you very much. I wanted to hear your views on that extremely difficult point. Then, as to the question of a mitigated virus. I think you agree that is a question open to doubt?—Yes, it is a theory, that is all.

2268. It is a hypothesis which has hardly risen to the dignity of a theory. It may or may not be correct?—It may or may not be correct, but I think it is well to consider it.

2269. You do not think yourself that the point that the mildest cases of syphilis are liable to be overlooked and not get treated, accounts for the whole thing?—I should not like to answer that. It has been shown by statistics that it makes no difference whether people have been treated with mercury systematically for years as to the interval between the primary infection and the onset of the disease. Supposing you took 100 cases of dementia paralytica that had been adequately treated from the very start, and 100 cases that had not been treated, or inadequately treated, the average time would be 10 years in both.

2270. What is your inference from that?—The inference from that is, that there is some difference; because we know that is quite different to what you get with syphilis of the nervous system where the membranes are affected and the blood vessels are affected.

2271. You showed a very interesting diagram bringing out the relationship between inflammation of the Fallopian tubes in women, and women dying from dementia paralytica?—Yes.

2272. I suppose that brings out a further point, that gonorrhœa is extremely common in women who also have syphilis?—Yes.

2273. And it is extremely frequent to have both infections?—Yes, very often people think they have only gonorrhœa and they have the mixed infection, but they are only treated for gonorrhœa.

2274. Does that give you any clue to the prevalence of gonorrhœa, do you think?—No, I should not think so.

2275. You are not able to say whether, in your opinion, gonorrhœa is more prevalent than syphilis?—I should think it was. I think it is very important. I do not think people lay enough stress upon gonorrhœa myself.

2276. You personally lay very great stress on the importance of doing a Wassermann test for every new-born infant when the parent has syphilis or is suspected of syphilis?—Yes.

2277. That would enable you to stop latent disease in that child?—Yes.

2278. And for that reason you would endow public laboratories for the purpose?—Yes; and also I think the exudation from doubtful cases of chancre could be sent to those public laboratories for observation.

2279. Undoubtedly; but the two things are both extremely important; the Wassermann from the congenital point of view, and the examination of the secretions from the point of view of dealing with these diseases at the onset?—Yes, the earliest treatment.

2280. In regard to the intra-dural injections for syphilis, was it not intra-durous?—Yes, intra-theal injection of the serum for the treatment of meningo-myelitis and locomotor ataxy.

2281. Have you ever had a patient who has submitted to a second?—Yes, I have had a very successful case recently.

2282. And the patient could stand the second and third doses?—Yes, it does not hurt.

2283. (*Sir Malcolm Morris.*) I did not understand, into the brain?—No, I am not speaking of into the brain. I am speaking of the spinal cord. But I think when you have a disease that is certainly fatal within 18 months, you are justified in adopting bold measures. Lots of people have come to me since and wanted it done.

2284. (*Dr. Newsholme.*) I should like to ask you one or two questions about the interpretation of a positive Wassermann test. If I may say so, you very judiciously cautioned against accepting Wassermann test as a necessary proof that the disease existing in the person who gave that test had been caused by syphilis. In other words, the Wassermann test might be a coincidence?—No, I do not think that. When did I say that?

(*Chairman.*) I did not understand you to say it.

2285. (*Dr. Newsholme.*) I am sorry, I misunderstood you?—I did the other day call attention to the possibility of scarlatina and measles giving a modified Wassermann reaction, when Dr. Ham was giving his evidence.

2286. I will put it in this way. In some of your figures you showed 7 per cent. of these patients suffering from other diseases than general paralysis of the insane gave a positive Wassermann?—Yes.

2287. Another series gave 16·4 per cent.?—Yes.

2288. In Berlin it is stated that about 12 per cent. of the adult population have syphilis?—Yes, I daresay that is true.

2289. That is an estimate, but, still, we must take it for what it is worth. If in 16 per cent. of patients with brain disease you find a positive Wassermann, might it not be open to the interpretation that it is a mere coincidence as showing the average of the Wassermann reaction in the general population?—That is exactly what I said. I said it might be only a coincidence; but if you have evidence of cerebral syphilis, then you might put the two together.

2290. Clearly. Therefore, the importance of the Wassermann comes in when you have evidence of disease which, on other grounds, you know may be due to syphilis?—Yes, but I think it comes in this, too. If you have a positive Wassermann reaction and the man has never been treated, you would immediately treat him in the hope that he would not get something later.

2291. With regard to the question of the relative incidence of the two sexes, your figures show a proportion of about 5 to 1, I think?—Yes, I should think it is more than 5 to 1.

2292. That is to say, more women or more men?—More men; because a large number of men go into private asylums and also die in hospital, and so on.

2293. Is that owing to the fact that most syphilitic men are not married; or owing to the fact that only in a proportion of cases they infect their wives, or owing possibly to both facts?—To both. But I should think a considerable proportion of the women who die of general paralysis are from the lowest classes, and very many of them are or have been prostitutes, but a lot are not. A good many are married women who, unfortunately, have been infected.

2294. Have you had any experience of the treatment of children with salvarsan?—No, I have not.

2295. Do you know in actual fact whether it is as good in the treatment of congenital as of acquired

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syphilis?—I should think it would be as good; I do not see why it should not be.

(*Mrs. Burgwin.*) I have no questions to ask.

2296. (*Sir John Collie.*) I take it there are many mild cases of syphilis which have been treated and have been followed by diseases of the nervous system?—Yes, a great many. A great many of those cases I referred to were cases that were looked upon as soft sore, and either not treated or treated only for a short time, and then, either through the fault of the patient or the doctor, not considered it necessary to go on with the treatment.

2297. Then, I take it, in your experience there is some correlation between these mild attacks of syphilis and ultimate paralytic syphilis?—Yes, not so much on account of treatment, I should say.

2298. That is the point I wanted to bring out—the mere fact that they are mild?—Yes.

2299. I want to ask you one question to make quite clear about the use of mercury. I presume you share the general medical opinion that neo-salvarsan has not necessarily superseded the use of mercury, and that both in future will take a permanent part in the treatment of the disease?—Certainly. I think that the intensive treatment which is advocated by Neisser is the proper treatment. You give one or two injections or more of salvarsan or neo-salvarsan and then follow it up with mercury.

2300. In no sense, then, is the treatment by mercury a thing of the past?—No, it is a most valuable treatment.

2301. If a proper notification of still births were obligatory, would you expect much valuable information to be forthcoming with regard to the effect of syphilis upon unborn children?—Yes, I should.

2302. I think you will agree that the more easy it is for patients to obtain medical treatment, the more readily they will resort to it?—Yes, certainly.

2303. In the event of venereal diseases being treated in general hospitals, would it, in your opinion, be a convenient method to have all such cases referred to a special department, not necessarily for venereal disease, but say for skin diseases?—I do not know that. You see, you might miss a number of cases like that. I think a man would go to the surgical department first.

2304. Yes I anticipate these cases would go to the hospital, and would then be sent to a special department, not necessarily earmarked venereal?—At the general hospitals a case is not earmarked as venereal at all; it goes to the surgical department if he is suffering from the sore. If he is suffering from some skin disease he goes to the skin department. But what I think is wanted is some correlation between all these departments, so that if a man goes to one department he can carry on the notes to the next department as to the treatment he has had.

2305. That I take to be a question of the internal administration of the hospital itself?—Yes.

2306. What is the most infective stage of syphilis?—It is infective in the primary and secondary stages, of course. I mean, the mucous tubercles are quite as infective as the chancres.

2307. Taking it in quantity and bulk, I take it the primary stage, the hard sore and so on, is the most infective stage and the more likely to cause the largest amount of infectivity or spread of the disease?—No. I do not think that comes in so much. The man who has a hard sore like that probably knows that he is infected.

2308. There is not the possibility of spreading it in that way?—Not only in that way. The secondary stage is very infective, especially mucous tubercles.

2309. You will agree it is to the infectious stages of the disease we should direct our energies if the spread of the disease is to be arrested?—Certainly.

2310. I read of a case in which one single woman had infected no less than 300 men with syphilis in one year. Do you say that is possible?—I should think it is quite possible.

2311. Do you think the support and encouragement of all institutions which treat syphilis, hospitals in general, by Government subsidies in some way, would

help towards a reduction in the amount of disease by encouraging early treatment and thus preventing its spread?—Yes. I think there are two lines of approach; one is the educational, namely, the satisfactory education of medical students so that they will thoroughly understand syphilis, and how to diagnose it at its earliest stages, so that when a student goes out to practice there may be no delay in dealing with it. The second is the provision of the means for him to carry out treatment.

2312. Am I right in saying that, with regard to the recent vast strides that have been made in the diagnosis and treatment of syphilis, if all cases in civilian life were diagnosed as early and treated as promptly and as energetically as they are in the Army and Navy, there would be a prodigious reduction of venereal disease generally in the country?—Yes, certainly.

2313. What effect do you think the early administration of neo-salvarsan has upon the risk of transmission of the disease?—It must reduce it, because it kills the organisms. The organisms are the cause of infection. But in my opinion you must not put too much stress upon it, because otherwise you will have people thinking they are cured when they are not cured. People have come to me and said: "I have had two doses of neo-salvarsan; why should not I get married?"

2314. Of course, they are very far from safe?—Yes, very far from safe.

2315. With regard to the question of method, am I right in stating that the methods whereby intravenous, hypodermic and muscular injections of neo-salvarsan, salvarsan, or mercurial compounds are administered, are found in practice to be more effectual and more rapid in their cure than those in which reliance is placed upon the patient taking medicine by the mouth?—Undoubtedly. But no doubt Colonel Gibbard will be called, and Major Harrison, and their evidence on those points will be more valuable than mine.

2316. Still, I think you will agree that the class of patients who have these diseases, by their irregular habits and mode of life, render the chances of systematic taking of medicine by the mouth for the cure of these diseases as a whole very unsatisfactory, in many cases?—Yes, very. I dropped it.

2317. Am I right in saying that the chances of central nerve disease—general paralysis of the insane, locomotor ataxy, or parenchymatous syphilis—would be much diminished if these primary sores were earlier diagnosed and earlier treated?—I think they would be.

2318. What is the danger of waiting for the commencement of treatment until the presence of the hard chancre is beyond all question, or until secondary symptoms develop, this, as you know, has been up to quite recently the practice of the profession?—When the organism develops in the lymphatic and blood circulations there is a chance of infecting all the organs of the body, including the nervous system and the vascular system. If you can kill off all the organisms before they get a nest where they can hide away, you may cure them altogether. In fact, since this treatment has been adopted, I know that many cases of re-infection have occurred, and re-infection is the only proof of cure.

2319. With regard to the early diagnosis of syphilis, you are aware, of course, that until recently it has been considered that a certain amount of time must elapse before one could be quite sure; but I gathered from what you said that this could be settled practically within perhaps 24 hours or 48 hours of the patient presenting himself to a doctor?—Probably in the majority of cases; but you know just the same as with the examination for tubercle bacilli in the sputum, you may not find it the first time, but you must not give up on that account. You ought to try two or three times. It is a very serious matter to say a man has syphilis if he has not it; so that you ought to make two or three examinations.

2320. In any case, either for tubercle or spirochaete, a negative diagnosis is of no importance, at least comparatively. It is the positive you want?—Yes, the positive is what you want. You ought not to say it

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i negative until you have exhausted all the means at your disposal.

2321. I suppose the microscopic examination which should be undertaken does not necessarily need very great technique or skill?—No: I think every medical student ought to be taught it; every medical student ought to be examined on it. If you examine them on it they will know it, but if you do not examine them on it they will not learn it.

2322. Until this happy state of affairs arises I suppose if specimens were sent to pathologists, it really could be settled in a very short time by an expert?—Yes, provided the men collected it properly.

2323. Then with regard to the Wassermann reaction, I take it that the mere withdrawal of a small quantity of blood—2 cc. or 5 cc.—is a comparatively trifling operation?—Yes; as a matter of fact people much prefer it to be drawn from a vein to having their ear jabbed a dozen times; they complain so much of the pain. Puncture of a vein does not hurt them at all.

2324. As a pathologist you find that it is not really satisfactory with a small quantity?—No.

2325. What is the minimum amount that you like?—You can do it on half a cc.; but it is not satisfactory. It is better to get two or three cc. You see, the advantage of taking a number of dilutions is this. Supposing you get a positive in all dilutions, then you treat the man and make another Wassermann and find he is only positive in two dilutions, then you know that your treatment has had some beneficial effect. If you go on with the treatment perhaps the reaction will disappear altogether. But if you only have one dilution, you are doubtful what will be the effect of the treatment.

2326. What do you suggest would be the best method of ensuring the early diagnosis and treatment of the disease. Are there any other methods you suggest besides the better instruction of medical students?—There should be some central laboratory where the blood could be sent and where the exudation from chancre could be sent to be examined. A man might not be competent, or able to do it.

2327. I suppose you will agree that the more facilities there are for the early diagnosis and free treatment of the poor especially, the more likely we are to stamp out the disease?—Certainly, especially if there is no stigma attached to it, and I do not think any stigma should be attached, it is a misfortune.

2328. (Rev. J. Scott Lidgett.) You have used, and others have used, three terms in regard to these infective organisms, the trypanosome, the treponeme and the spirochaete?—Excuse me, the trypanosome is as different from the spirochaete as an ox from a sheep.

2329. But has it no relation to syphilis?—No, no relation to syphilis, but it produces changes in the nervous system very like, in fact almost the same as, those produced by syphilis.

2330. You will forgive a layman. There are two terms, treponeme and spirochaete?—Yes.

2331. Do you mind explaining the relation of those two?—Some people prefer the term treponema pallidum and some people prefer the term spirochaeta pallida.

2332. So that we may treat them as absolutely the same?—Yes, as synonymous.

2333. It had been suggested to me that one represented the organism at the start, and the other later on?—No, there is no distinction.

2334. Is there any distinction in the class of cases sent to the various London asylums?—No, the beds are allocated according to the vacancies.

2335. So that there is no designed predominance of the cases of G.P.I. sent to Cane Hill Asylum?—Presumably the districts to the south of London, like Lambeth, if it were possible, would have their cases sent there, because the friends would have a shorter distance to go to visit them, than if they were sent to Claybury, in Essex, for example.

2336. That is not quite the point of my question. You spoke of 33 per cent. of the admissions to Cane Hill having been found to give positive Wassermann reactions?—Yes.

2337. May we take it that would be the percentage likely to be found in all the others?—I should say it

would be about that, but I cannot say because, as I pointed out, these figures are preliminary only. We are continuing this investigation; but I should think they would be about 33 per cent.

2338. So that you have no reason to think that any accidental or designed conditions at Cane Hill make it excessive?—No.

2339. You spoke of panel doctors, but it does not necessarily follow that a panel doctor treats a maternity case, does it?—No; but maternity benefits are given, and a panel doctor would treat under those circumstances.

2340. I thought that maternity benefits were paid automatically to women, who might not be treated by a panel doctor?—That is so. Then I was mistaken.

2341. May I ask two questions on another part of the subject? You have spoken of injections into the spinal cavity. How long do those prolong life?—We do not know. I merely said this, that on pathological grounds it is believed that if you inject the serum of the patient into the spinal cavity, it will get into the spinal cord and either stop the growth of the organisms or have some influence upon them, so that the disease may be arrested, because, you see, the serum has what we term a bactericidal influence, the cerebro-spinal fluid has not that bactericidal influence by itself.

2342. Then are we to take it that these experiments are so recent that you have had no time to investigate the result?—Yes. They were given at the International Congress by Dr Swift, and it has been applied at Edinburgh in the asylum, and I have had a case recently. It seems to have done good in some cases.

2343. That is to say, there seems to have been a temporary alleviation of the symptoms?—So far. It is not a serious operation at all. It would be serious if you were to try to put it into the brain cavity.

2344. (Canon Horsley.) I have one or two questions also from a lay point of view, not only because I am a layman, but because the report of the proceedings will be read by laymen. You say on page 6 of your evidence, "after four falling doses." What is a falling dose?—A diminishing dose.

2345. The word "salvarsan" is very largely used. I suppose it is a sort of portmanteau word?—I do not know.

2346. Does it mean *salutem versus et sanitatem*, and taking three syllables out?—No, it is called "606." I do not know why it is called that.

2347. By my suggestion salverson means healthwards. I did not know whether it was a compound word?—It is a very good word for it.

2348. What is the difference between neo-salvarsan and salvarsan?—Neo-salvarsan is newer salvarsan.

2349. How is it new?—It is a different chemical compound. It can be easily dissolved, and it does not require the same technique as salvarsan.

2350. Has it superseded the use of salvarsan?—No; many people prefer salvarsan and many others neo-salvarsan, Mr. Lane will tell you about that.

2351. What is the chemical constituency?—The essential chemical constituent is arsenic.

2352. Practically it is arsenical treatment?—It is an arsenical-benzol compound.

2353. This is a very important question from some points of view. When a cure is followed by renewed fornication, what will the result be—a renewal of the disease?—If a man came in contact with the syphilitic organism, he would be reinfected.

2354. *Toties quoties*?—Yes.

2355. Then when a man has once been syphilised, is he more liable to the disease after a cure?—The only thing I know about that is this. Perhaps Sir Malcolm Morris or Mr. Lane might know more about it than I do. I have seen one case, before salvarsan was introduced, where a man was infected a second time, but he passed very readily into the tertiary period—the gummatous period.

2356. Of course, in the case of habitual drunkards they become practically men who could take what you and I could not. It is not the same case as regards that, is it?—No, it is a question of the living organisms.

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2357. A man of moral life is not less likely to be infected?—It is a living organism, and it does not matter what the life of the individual is; if he gets that organism into his body it will grow there. Of course, alcohol does influence the condition.

2358. With regard to insanity, I see the number of figures have about exactly doubled between 1894 and 1912. That, you point out, is partly due to accumulation?—Mostly due to accumulation.

2359. I do not know. Is it not also a great deal due to the fact that the improvement in asylums has made people less reluctant to go there?—Yes; and another reason is the discharge rate has diminished with the increased accommodation.

2360. I have had to certify over 200 lunatics myself in a year, and I know it is very largely a case of people going down to see what a beautiful palace Cane Hill, for example, is, and they say: "I would like my aunt or mother to go there," whereas, before, they would avoid it?—Yes, there is much less objection.

2361. Do not you think on that point there is a considerable difference between public and private asylums in attractiveness?—I am not familiar with the private asylums.

2362. I am familiar with some of them. I have had to visit them?—I think very likely they are perhaps not treated as well in the private asylums.

2363. I have been very much prejudiced against certain private asylums that I have had to put people in. I will not name them. I am sure they would have been very much better off in the public asylums?—I daresay they would be.

2364. You said the great prevalence of G.P.I. in certain districts of London seemed rather inexplicable; why there should be a difference of 29 and 8 and so forth?—They are such small figures that one cannot take much from them.

2365. I suggest one reason might be found if you had a census of the number of common lodging houses in the district?—Yes, I think that is an important matter.

2366. At Woolwich I had 24 lodging houses, housing the lowest and worst, and the parish generally went by the name of the Dust Hole. In Southwark, with which I have been connected for nearly 20 years, we have an enormous proportion of them. We have in some of them 600 or 700 men of the lowest type?—That, I think, is probably the cause of Whitechapel being so high.

2367. That might possibly account for the fact of Southwark, my own borough, having the highest proportion in the whole of South London?—Yes, I think it is.

2368. We are enormously unfavoured at present?—Yes.

2369. I think if you were to get a sort of map from the police, you would find a lot of interesting things to compare?—Yes; one really wants a map that is up-to-date, like in Mr. Booth's book on the "Life and Labour of the People."

2370. The police will give it to you. They are all under the police. That has a distinct relation towards vice rates, and I think probably towards syphilis rates. Then with regard to infantile complaints, I was talking the other day to a doctor of whom I have a very high opinion, and he gave me this apothegm, "When in doubt, treat for syphilis." If he could not quite diagnose what a child was suffering from, he applied some mercury or something of that sort?—Now he can tell without any doubt, because he has the Wassermann.

2371. But in the country it might be difficult?—I do not know.

2372. Then with regard to the detection, from a national point of view, of where syphilis exists, it is quite possible in the case of every birth for the blood of the child to be tested, whether the child is alive or dead?—Quite.

2373. Without the mother or anybody knowing it?—Yes, that is what I said.

2374. That would rather indicate the line of least resistance, perhaps?—Yes, because it is so easy to take

the blood from the umbilical cord without anybody knowing anything about it.

2375. And that might easily be done?—Quite.

2376. That is not even so harrowing as the American proposal to remove the appendix. It could be done without any operation and without any knowledge. I have only one other question, that is, with regard to the relation of alcoholism and syphilitic disease. Does alcoholism increase the susceptibility to syphilis?—It increases the liability to syphilis, because a man loses his judgment and he goes astray. That is so often the case. You find a man gets drunk and he gets infected. Another thing I must say is this, that a person who has syphilis of the nervous system has an invalid brain, and if he drinks he will certainly suffer seriously from it. In fact, he cannot drink to the same extent as a man who has not.

2377. I did not mean quite from the wilful point of view. I know, myself, plenty of people who would never have put themselves liable to syphilis unless they had been drunk, and, also, girls, for example, who have been violated and wronged when they have been made stupid with drink and have been infected. I mean rather apart from that, does the effect of a person being alcoholic render him more likely to take syphilis than a person who is not, provided they do the same act?—I do not think so.

2378. Then does alcoholism increase or decrease the curability of a person?—It decreases the curability.

2379. To a very large extent?—I should think alcohol plays a very important part in connection with aggravating the disease.

2380. That is what I wanted to get at. It not only aggravates the disease, but it aggravates the virulence of the disease?—I do not know that it would aggravate the virulence, because I do not know that alcohol has much effect on the organism; but, by lowering the vitality of the tissues, it allows the organism a better chance to grow.

2381. It decreases a man's curability?—It decreases his vital resistance.

2382. And his curability?—Yes.

2383. With regard to G.P.I., it has puzzled me very much why it is a male disease. Is there any reason why women should not get it?—They do get it.

2384. But to a very small extent?—This is as high as three males to one female in some districts of London.

2385. With regard to this particular workhouse I have been familiar with for a great many years, I got a letter to-day from the physician who said that last year he had 187 cases of female lunatics sent into his particular infirmary, and out of that number he could not find more than one case of G.P.I., and that one died. That is one out of 187?—I told you there were 402 males who died of general paralysis at Claybury Asylum, and 146 females.

2386. Then that does look rather as if they congregated there?—That is three to one; it is a coincidence.

2387. This is 187 and only one. Earlier in the letter he says there are ten times more men than women afflicted with that disease?—It is not so high.

2388. It is rather a strange thing when you find, out of 187 there is only one case, unless it is an entirely wrong diagnosis?—Perhaps he may not have diagnosed one or two, and then it would come out to 2 per cent.

2389. For three years I had to see all the lunatics there and settle everything, and I cannot recall a case of G.P.I. amongst women. We had them among men and they were sent on to the asylum?—It is more difficult to diagnose it in women than in men. It is very curious, but we did not have a single female death from general paralysis last year at Claybury. It is very remarkable.

2390. (Mrs. Scharlieb.) With regard to the difficulty of treating people, you and Dr. Newsholme were talking a few moments ago about the danger of breaking up family peace and so on. Do not you think we must rely to a great extent upon educating the people?—I do, indeed.

2391. That we must endeavour to stop the present policy of silence?—Exactly. I think that is quite

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right. I think people know a great deal more about it than, perhaps, one imagines.

2392. I think they have got to know a great deal more in the last few months?—Yes.

2393. Then would you not also endeavour to stop the idea that syphilis is invariably the result of immorality and that a stigma must attach to it?—Yes, that is very important. I think it should be regarded as a misfortune rather than as a stigma. I think the fact of the stigma has done so much harm in the way of covering it up and preventing proper treatment. It is a misfortune.

2394. Of course, we do not ignore the moral side; but, as doctors, we are interested in the spirochaete and its effects?—Quite so.

2395. Then do you not think that these young boys and also, no doubt, girls ought to be warned beforehand of the consequences of their acts? When we see from the Registrar-General's reports that children of 15 or 16 may die from syphilis, ought not fathers and mothers to be careful in the instruction of the young?—Yes. I think that will come about.

2396. Then, of course, you would also emphasise the necessity of examining all doubtful cases?—Yes, certainly. I lay great stress upon that.

2397. And also you would afford every facility for treatment?—Certainly.

2398. Do you think it is best to have a special ward in a general hospital?—I think there are reasons for and against. You see, now we have this salvarsan treatment we need only take a patient in for a night. It is not like a special ward in the olden days, when we had people with their noses dropping off and all those horrible sights. It is these latent forms that want to be treated.

2399. What I really meant was, you would not put them in a separate hospital?—No, I do not think so.

2400. You would entirely do away with all that idea; that they must be kept apart as if they were moral lepers?—Yes, at the same time we must recognise the immensely valuable work that the Lock Hospital has done and will do in the future, I think.

2401. Only the name is very much against it?—Yes, it is. It is a pity it is called the Lock Hospital.

2402. Did I understand you to say that a great many cases of epilepsy were really due to syphilis?—No, I did not.

2403. Then I misunderstood you?—I said the children dying of convulsions where there is a syphilitic history, were probably syphilitic and they call it convulsions for a name. That is what it is. I do not mean to say that children dying of convulsions are syphilitic. The majority of convulsions are caused by gastro-intestinal disturbances. But when you have the history that I had in that case and the children died of convulsions, it may be meningitis or syphilitic disease.

2404. (*Mrs. Creighton.*) You spoke of an article you had written some years ago. Is that still to be got?—On congenital syphilis?

2405. Yes?—Yes.

2406. Would it be useful for specially us lay members in order to enlighten us?—It might.

2407. Might we ask for it, and in the same way the discussion which took place in 1912 which was alluded to. Would that be useful for us?—Yes.

(*Chairman.*) You have that, and we will get the other one for you.

(*Witness.*) That was in the proceedings of the Royal Society of Medicine.

2408. (*Mrs. Creighton.*) You spoke about a mother after having one still-birth which there was reason to suspect was due to syphilis, and then being treated?—She had several still-births.

2409. If she had been infected by her husband, would the fact of her being treated prevent re-infection?—The husband probably would not have been infective after a few years. The organism seems to lose its virulence. I have heard of a case where a man was thoroughly treated—and it is the only one I have met with—for four years by eminent people in London. He then went to a most eminent man who said: "Certainly you may marry," and he married,

and the effect was that the first conception was a still-birth, the second one died a day or two old, the third one suffered with iritis, keratitis and ear deafness, and the next one died of general paralysis. That is how I got the history of the case; but it is very rare indeed. After five years, as a rule—and I think Mr. Lane will agree with me—it is exceedingly rare.

2410. Then may I ask you a few questions with regard to what you said about no stigma being attached. I suppose in all cases of disease a medical man would feel it part of his duty to warn his patients how not to contract that particular disease?—Yes. But I mean to say this. There are lots of young fellows who, perhaps, only make a mistake once. Are they to be banned all their life because they have made that one mistake; whereas another man who is much more immoral goes about and does not contract the disease, and he is not banned by society at all? That is the injustice, I think.

2411. I was not thinking about their being banned. I was simply wishing to know whether the medical man in all cases would not warn a young man and point out to him that this particular disease could be avoided by a moral life?—Yes, but he comes to him suffering from the disease. It is too late to warn him. I think then the warning should come on a printed paper given to everybody who suffers from the disease at all, telling a man that it is a curable disease if he will only follow out the treatment. Secondly, he is infectious for a certain time, and thirdly, he must come up periodically or he will suffer with serious results. In this book I have given what is adopted by the Hamburg Hospital, and there they tell them what to do. It is a printed form given to everybody. That is all right.

2412. But take this particular young man who comes to you at quite an early stage of the disease. You cure him?—Yes.

2413. You say that, but the sign of real cure is that he is liable to reinfection?—Yes. But, you see, an enormous number of people are walking about suffering no effects from the disease at all, just the same as there are probably 50 per cent. of people who have had tuberculosis. You might speak of it as beneficial vaccination. A very large number of people have beneficial vaccination in syphilis, fortunately for them, and they cannot take it again.

2414. That was not exactly the point I was getting at. I mean, this young man is cured?—Yes, but I want to draw a distinction between cure and the possibility of reinfection. There are only a very small proportion who are capable of reinfection; that is to say, the disease has been so treated that the organism has been killed and destroyed in his body. But there are a vast number of people who will never suffer from the disease at all, but who have the organism still in their body which gives them an immunity from the disease in the future.

2415. Therefore, you mean, such knowledge coming to a young man who had been cured might make him feel immune from the danger and, therefore, much less careful of his conduct afterwards?—I certainly think one should warn him in the future.

2416. (*Canon Horsley.*) Do the doctors say: "Go and sin no more"?—That is the duty of the clergyman, I think, more than the doctor. The doctor has to treat disease.

2417. (*Mrs. Creighton.*) I was going to ask you that particular question. If the man had some other disease through drinking impure water say, you would say to him: "Be careful of the water you drink." You would think that a medical man's duty?—Yes.

2418. But because this happens to be a moral act, is it not just as much a medical man's duty to say: "Go, and sin no more in that particular way."?—I think so too.

2419. You cannot say in this particular matter because it is a moral matter, any more than any other, that the medical man must not be preventive as well as everything else?—I think the point is this; that you must tell him he is infectious for a certain number of years, and it will be a crime if he goes and infects anybody else, or if he marries anybody without the

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[Continued.]

permission of the doctor who is treating him, and who knows his case. I think there the doctor has a perfect right to give him the strongest advice, and also, of course, he could say the other thing to the young man. Whether he would follow his advice I do not know.

2420. You said that the male Jews were very liable to G.P.I. Are the female Jews not?—I cannot speak about the Jewesses, but I do not think the male Jews are more liable than the Christians: All I said was that the incidence of general paralysis among the Jews was much higher than I expected it to be.

2421. Because we are always told in all purity work that Jewesses are so very seldom prostitutes?—That is quite true.

2422. But it does not follow that the male Jew is more moral than the Christian?—No. I should think he was not, myself. I cannot speak with regard to that from any definite data.

2423. (Mr. Lane.) We have laid great stress here on the importance of the Wassermann reaction. Does the presence of a positive reaction imply that a man will necessarily infect his children?—No, I do not think so.

2424. He might get married with a positive Wassermann reaction?—It depends how long after infection took place.

2425. And also on treatment?—Yes, on treatment. Supposing a man had a positive reaction in all dilutions, and he would not yield to treatment, I should then think that it is my duty to say "I ought to put the case fairly before the friends of the young woman and say to them 'I do not think there is any chance of infection, but there is a chance that you may have to nurse a man for the rest of his life.'"

2426. Then you agree the children are very unlikely to show any signs of congenital syphilis, though the Wassermann may be positive?—It depends on how long after infection.

2427. If you effectually treat it before?—It is five years.

2428. So that the positive Wassermann only means that that person himself may suffer from some nervous syphilis later on?—I think those statistics on the table of the paralysis showing that there was not a very high incidence, in fact not much above the normal of miscarriages and still births, show that they do not infect their wives, although all those would have given a positive reaction according to our results.

2429. Then you say the character of the primary sore and the severity of the secondary symptoms are no guide to the severity of the disease of the nervous system?—That has been my experience.

2430. That would also apply to other tertiary symptoms?—Yes, I think so.

2431. To the tertiary stage in general?—I think that may be partly due to the fact that those cases are less likely to be adequately treated.

2432. So that a mild attack of syphilis is likely to be followed by severe tertiary symptoms—more likely than in a severe case?—I would not say tertiary symptoms, that is to say, these tertiary symptoms such as parasyphilis and tabes. A man in Vienna in discussion there said he hoped cases would always show a skin lesion, because then he found they never suffered afterwards from dementia paralytica. But that is not true; it is overstated.

2433. With reference to alcohol, and the alcoholic having a more severe form of syphilis than others, that is probably due to the fact that alcohol neutralises the effect of mercurial treatment, is it not?—I should think it does that by lowering the resistance of the body generally, because I believe that the mercury and the arsenic only act by producing anti-bodies.

2434. Then I understand you to say that the time for the appearance of dementia paralytica is the same in treated as in untreated cases?—That was the observations of a German who made careful analyses of cases; I think it was Schäfer.

2435. That is rather discouraging to treatment?—Yes, it is.

2436. With regard to the question of laboratory facilities being given for examination of blood and so

on, a great deal depends on the way in which the blood is taken?—Yes.

2437. And the ordinary practitioner would require a certain amount of education before he could be relied upon to send the proper specimens?—It was a very common thing to bleed people from the arm in the olden days. When I was a student I bled lots of people from the arm.

2438. You never see it done now?—I do not think it is done enough.

2439. If you asked a student to bleed now, he probably would not have the remotest idea how to do it?—I think every student should be taught that, and taught to do the intra-venous injection. It is the most important thing he can learn. He ought to be taught how to diagnose the case from the very beginning. I heard Colonel Melville say at the discussion of a committee of the Royal Society of Medicine: "Men come to us knowing as little about syphilis as they do of beri-beri." The surgeons there said they should be taught better in the hospitals.

2440. (Sir Malcolm Morris.) You have a very wide experience. What are the various ways by which you have known syphilis acquired, other than venereal ways?—When I was at Liverpool I heard of seven cases at St. Helens of glass blowers.

2441. Have you ever come across cases of syphilis that have actually been caused through vaccination?—No, I have not. I had a case not long ago of a nurse who came into a hospital with syphilitic iritis and deafness. I do not know how she got it. Of course, I believe in Russia a very large proportion of the population get syphilis in that way—I mean of the syphilised—by drinking vessels and so on—that is the children.

2442. Do you know whether there has been less accidental syphilis from vaccination since there has been calf lymph as opposed to arm and arm?—I do not know. I have not investigated that.

2443. Have you come across any cases of syphilis produced by circumcision?—No, not in my experience; but my experience is concerned especially with diseases of the nervous system, dementia paralytica, and so on, and therefore I have not had the opportunity.

2444. Have you heard of any cases that have been acquired by cigar manufacturing?—No; I should think it is quite possible.

2445. You know of the cases that have been reported in America?—Yes, I have heard of them.

2446. And accidental infections of medical men and women?—Yes, I have heard of plenty of those.

2447. Where have the original lesions been?—On the finger.

2448. Have you ever come across or heard of any particular case in which there has been an infection of medical men without any primary lesions being found?—No, I have not.

2449. You have not known of any particular cases?—No, I have not.

2450. With regard to the question of infection of women by conception, you know Fournier's book on the question of infection by conception without any primary lesion?—Yes.

2451. Do you know what proportion of these nervous cases come in that particular way?—No, I have not any idea. I have heard of it, of course.

2452. Have you any idea as to the proportion of cases of diseases of the nervous system which come by accidental syphilis as compared with syphilis got venereally?—No, I have not. I know it is said that people are more liable to serious results by syphilis insontium. Four people getting paralytica dementia or tabes after chancre of the lips is a very high proportion.

2453. Take Dr. Colles' case. That was an accidental infection through vaccination, and he died of nervous disease. What was the particular disease of the nervous system that he died of?—I do not know.

(Mr. Arthur Newsholme.) Syphilitic arteritis.

2454. (Sir Malcolm Morris.) That was accidental?—Yes.

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2455. Do you think accidental cases are more likely to lead to nervous diseases?—No, I do not think so.

2456. Is there any evidence of that?—I do not know why it should myself.

2457. It is constantly stated that it is so?—I know; but I do not know any reason why it should be so.

2458. I was asking whether you had any personal experience?—No.

2459. In the cases of races where they have had no syphilis, and syphilis is introduced, is it not the fact that they die rapidly, so that they are less likely to have diseases of the nervous system?—They do not get these late manifestations of dementia paralytica and tabes, but they get severe forms of nervous disease, I mean disease of the vessels of the membranes and gummata of the brain and so on.

2460. Do not they die very rapidly, and perhaps that is an explanation of it?—It may be so. That could not be the case in India, could it, where syphilis has been present for a long time?

2461. You know Fournier's tables of the difference between syphilis of the upper classes and syphilis of the lower classes, where he pointed out that the poorer classes had much more severe cutaneous manifestations and other forms of syphilis, whereas in the upper classes there were more nervous diseases?—Yes, I can quite understand that.

2462. Do you think that is so in this country, from your experience?—It does not look like it with regard to general paralysis, because in women the poorer classes are more affected with it and with locomotor ataxy too.

2463. If his view were correct, one would expect to find a larger number of cases of general paralysis in the upper classes than in the lower?—You do not in the female sex. You certainly find very few indeed. It seems to me to depend upon the incidence of syphilis. Of course, he regarded it quite differently; he looked upon it as a post-syphilitic condition. Now we know it as actually due to the organism.

2464. (*Sir Almeric FitzRoy.*) With regard to the presence of syphilis in children, is not infantile bronchitis largely due to syphilis of the lungs?—I do not know. I would not like to venture an opinion on that. I should have thought not myself. Of course, children suffering from marasmus due to syphilis are terrible creatures when they live. They are little wizened-up creatures, and they would be more liable to suffer from bronchitis, and probably would be registered as dying of bronchitis.

2465. In that way?—Yes, in that way.

2466. What about rickets?—Some people have thought that rickets was associated with congenital syphilis, but there is a difference of opinion about that.

2467. There is no increase in that belief; I mean it does not rest on a higher basis of probability than it did some years ago?—No, not at all.

2468. You instanced the Scandinavian countries as providing the most perfect records of syphilis and its sequelæ, did you not?—Yes, due to its notification.

2469. Is it because in those countries State regulations required hospital treatment of the disease?—Yes. It is a remarkable thing that a very long time ago indeed Kjellberg and Jessen pointed out that general paralysis was due to syphilis, because they had seen cases treated for syphilis in the hospital, and they eventually came to the asylum. That was long before Fournier made that statement.

2470. (*Sir Kenelm Digby.*) In answering Mr. Lane just now, you spoke about giving to each patient who appeared, say, for the first time, for treatment at an infirmary or hospital, a paper of instructions?—Yes.

2471. You also dealt in some of your former answers with the great importance of getting some sort of organisation by which, if a man goes to another institution at a subsequent date, his record would be known?—Yes, I think that is very important.

2472. Would it not be possible to carry that out in some such way as this. It occurred to me while you were giving your evidence, that a system might be adopted something like that we now have with regard to the police. I mean, if a man commits a crime, and is

sentenced, he has his finger prints taken, and wherever he goes his record is known, or can be known. When he is brought up for committing a burglary, and he has committed a series of offences, his whole record is known and easily ascertained. Might it be possible when a person comes to be treated for syphilis, to have a card given to him such as you suggested just now, and that that card should be in some way recorded. It would be perfectly easy to do it by the finger print system. A central office could be kept for the records, so that supposing he went to a hospital in another part of England, he would be asked for his card, and his finger prints would appear on the card, and his identity could be known, and his record taken by some central office, just as there is at present at Scotland Yard, where all cards from different parts of the country are sent, and everybody's record is known?—That would be very valuable in the way of treatment. At the same time one has to remember that we must not do anything that would lead to the man not coming for treatment, because of the fear that this would pursue him wherever he went.

2473. That of course is a detail?—The idea is a good one.

2474. There is really nothing more in a man giving his finger prints than there is in signing a book. He simply puts his fingers down, and there it is?—Of course, this card he had would state on it the date of the injection of salvarsan, Wassermann reaction positive, and so on. That could be put on his card.

2475. Still, you must have a system of identifying him, so that when he comes to the hospital in another part of England, having been treated, say, at London for a disease of this kind, the authorities there would be able to ascertain at once whether he had been treated anywhere else?—On this card one would give him directions about continuing treatment, and directions with regard to not infecting other people, and so on. That would go with him, and when he wanted treatment, he could take the card to any of the recognised hospitals, and they would know.

2476. One cannot go into details now, but it seems to me that we might have some such system as that. He might have a card, and a duplicate of that card sent to some central institution?—Certainly, so long as he did not know it.

2477. A photograph of it might be sent to some institution, and then the hospital to which he came in the second instance would at once refer as to whether the man had been treated before. I only suggest something of that sort?—Yes; you want some systemisation of that kind, I think.

2478. I think with the experience there is now of the working of the card system and the instantaneous identification of a man who has been convicted before in any part of England, it can be done in five minutes?—We do not want the man to think he has been convicted.

2479. No; I am only using that as an illustration of the method. It would be a very different thing. But do you think that something of that sort might be done?—Anything that would lead to continual knowledge and treatment until the man was safe would be of great benefit to the individual himself, and to the community.

2480. It occurred to me while you were giving your evidence, that some system of that sort might be applied to finding out whether the man suffered before?—I think the army might furnish such a thing as that when the soldiers leave.

2481. (*Sir David Brynmor Jones.*) As you are one of our own body, I do not think it would be advantageous for me to ask you all the questions I should like to ask at this moment; because, as I understand the evidence that is given by the witnesses is to be the principal authority or datum on which our report is to be based?—Yes.

2482. I am looking forward, of course, to continual conversations with you when the time comes?—Quite so.

2483. So that I wish to safeguard myself by saying at once, that I do not propose to go over all the ground that suggests itself to my mind?—Quite so. The

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Chairman has permitted me to say that on a future occasion, when I have finished these other observations, I shall be able to give evidence again.

(Chairman.) Yes.

2484. (Sir David Brynmor Jones.) In that case then I will not ask you what I should ask you otherwise. What is included under the term "venereal disease," in your opinion, in the terms of reference? That seems to me a crucial question when we come to make our report.—I should include syphilis, gonorrhoea, and the soft sore, which is not really of very great importance.

2485. I wanted to give you a sort of illustration of the kind of question I would ask, but I do not think I will ask you at this moment. Another line of examination that I should adopt would be this. What degree of certainty do you attribute to your propositions?—Will you name which proposition?

2486. Yes, as a mere illustration. You say: "The Wassermann reaction has been shown in this laboratory to give a positive reaction on the cerebro-spinal fluid in paralytica dementia of 97·9 per cent. Only four cases out of a total of 195 failed to give the reaction." I understand you infer from that that syphilis is a cause?—Is the cause—the especial cause.

2487. An invariable antecedent?—Yes, of dementia paralytica.

2488. But if it fails in any one case, surely you do not demonstrate the proposition?—I admit your argument from a logician's point of view.

2489. From the logical standpoint?—Yes; but you see it may be when you are doing such a number as that, something might have happened through which the test did not come off. It might have happened at that particular time, that the organisms which produce the reactions were inactive, and if you had had a lumbar puncture another time, as we know very often we get the reaction. But when you get it in 97 per cent., you can practically say it is really sufficient.

2490. The adverb "practically" is one that every lawyer shies at?—Yes, I know. But you see we have controlled these results by only taking those cases by post-mortem examination. We have done many more than the 190. So that we are quite sure those are cases of dementia paralytica. Secondly, I have recently been able to find the spirochaete, the organism of syphilis, in more than 50 per cent. of those cases which we have examined lately, and, therefore, seeing the enormous surface of the brain, it would take you a year if you wanted to examine every part of the brain. I just take the part where I think it will show the organism, and, non-finding does not mean non-existence. When you find it in so many cases as that, you can practically say it is.

2491. You do not go on what the logicians call the method of agreement only, but you do apply the method of the difference or the method of concomitant variations as well?—Yes.

(Dr. Newsholme.) Dr. Mott has forgotten one method of difference, that in normal persons similarly examined, the Wassermann did not come off.

(Witness.) It never comes off.

(Sir David Brynmor Jones.) That is the method of difference. That I understand: that that Wassermann reaction is never positive.

2492. (Dr. Newsholme.) You did omit that?—Yes.

2493. (Sir David Brynmor Jones.) Let us come back and try it in another way. A man comes to a doctor, and the doctor says, "This is a case of locomotor ataxy." A Wassermann test is applied if it is a case of locomotor ataxy, and the reaction is negative?—It very often is.

2494. The test fails; it is not syphilitic?—Yes, it is. I would not give you that; because I mean to say if the man has been under treatment the reaction would not come off. Locomotor ataxy differs from dementia paralytica in this, that it is a very, very slow process, and it affects only a very small portion of the nervous system—minute tracts only. Therefore there

might not be enough of the poison acting to give a reaction in the fluid in more than perhaps 50 per cent., or say 60 per cent. of the cases. But if you waited perhaps and examined that man on a future occasion, you would find that he did give you a positive reaction. Of course in medicine we can never reduce it to an absolute certainty.

2495. Still, with all these qualifications, your methods do not produce that kind of demonstration which has been given by scientists in the region of mechanics, for instance?—No. But I think it is as certain as with regard to the tubercle bacillus causing tuberculosis. Very often you cannot find the tubercle bacillus in the sputum, yet you are perfectly certain it is tubercle that the patient is suffering from.

2496. I have given you one illustration of the kind of criticism which in due course I shall venture to make, if I feel it my duty, upon the evidence. Let me give you another. You have talked about spirochaete. That is a germ or cell, is it not?—It is not a cell; it is a living organism.

2497. Not a cell, but a living organism?—I mean to say you can hardly speak of it as a cell, yet I suppose one could speak of it as a cell—no, I do not think I should call it a cell.

2498. Then supposing I were to present to you some authorities for the proposition that all living beings consist of cells or rather aggregates of cells, would you deny that proposition?—It is certainly not an aggregate of cells; it is a living protoplasm, and it has a definite character, which is unlike any other organism, and has definite reactions, and has definite movements.

2499. I am not affecting any knowledge; my mind is really a blank on the question, because I am not skilled; but I do think it is right to examine these propositions from a logical point of view. Is a spirochaete something which you can see with a microscope?—Yes; I should like to show them to you; they are very beautiful objects. There is a picture here.

2500. I have read one or two things, and I have also been trying to fortify myself by reading about the origin of life, and speculations which, *primò facie*, may have nothing to do with our inquiry?—Here is one. (Witness proceeded to show certain illustrations in a book, and explained them to Sir David Brynmor Jones.)

2501. (Mrs. Creighton.) I should like to ask you another question. Can a woman get general paralysis from her husband?—She gets syphilis.

2502. Can the infection from the husband determine the form the syphilis will take?—That we do not know.

2503. Is it your present idea that it will be something in the disposition of the woman that will influence the form?—I should not like to answer that question definitely. All I can say is, that about 2 per cent. of paralytics that have occurred in an asylum in Germany were conjugal paralytics; that is to say, husband and wife suffered from it.

2504. That point is not clear yet?—No; there were 14 cases, and 700 admissions, or something like that.

2505. (Chairman.) May we take it it is certain that there cannot be any vaccination syphilis from the use of calf lymph?—I certainly think so.

2506. There can be no doubt about that?—There is no doubt about that.

2507. Then I understand your opinion is that there is not nearly enough instruction given to young doctors who are going to practise, to educate them?—Yes.

2508. Then one of the things we have to do is to insist on a much higher standard of medical education in that respect?—Yes; I do think that is very important.

(Chairman.) Thank you very much.

(The witness withdrew)

EIGHTH DAY.

Friday, 12th December 1913.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Sir WILLIAM JOHN THOMPSON, M.D., called and examined.

2509. (Chairman.) You are, I believe, the Registrar-General for Ireland?—Yes.

2510. How long have you held that office?—Four years.

2511. Are your records brought into line with the records for England and Wales and Scotland; do you work, that is to say, on a common form of arrangement, of your figures?—Yes; on the whole the records are much the same as in England and Wales and in Scotland.

2512. Therefore, we may regard them as comparable with the other records?—Yes, as far as possible.

2513. To whom do you make your annual reports?—We make our annual reports to the Lord Lieutenant. The office of Registrar-General in Ireland is directly under the Lord Lieutenant.

2514. After that, you do not know, I suppose, what becomes of them?—They are presented to Parliament through the Lord Lieutenant.

2515. But, so far as you are aware, there is no central authority which brings together the reports of the three Registrars-General, collates the figures, and puts them in the form of a general record for the United Kingdom as a whole?—No, I do not know of any such central body.

2516. Will you explain to us how the work of registration is arranged in Ireland; how Ireland is divided into districts for your purposes?—First of all we have poor law unions. Ireland is divided, roughly speaking, into 158 poor law unions—I am not quite sure of the figure—and each of those unions is divided into a number of dispensary areas for dispensary doctors.

2517. Is the dispensary area the lowest unit?—Yes; each dispensary area is the area for registration purposes, and the dispensary doctor is the registrar; so that we, in Ireland, have the registration done by medical men.

2518. The whole of your registration, we may take it, is done by medical men?—Practically all. There may be a few cases in which doctors did not wish to take up the work of registration.

2519. What populations do the dispensary areas contain, roughly speaking?—I cannot say exactly, but, roughly speaking, we have about 1831 dispensary areas all over the country.

2520. Are they uniformly distributed?—They are as uniform as possible. In some cases where the population is very sparse, as in Connaught, the dispensary area would be larger and the population smaller. If you take a large centre like Dublin or Belfast, the area is smaller and the population larger. I do not think I could give even an idea of the population in each dispensary without reference.

2521. The registrar of the dispensary district reports to whom?—As registrar he is directly under the control of my office.

2522. He reports directly to you?—He reports directly to the clerk of the union, who is called superintendent registrar, and then the superintendent registrar reports directly to us.

2523. The superintendent is only the post office, so to speak?—Yes, so to speak.

2524. But in fact you communicate directly with these doctors in charge of dispensary areas?—Yes.

2525. Then in any cases in which a doubtful certificate is given, do you correspond with the doctor who registers the case?—No. We correspond with the doctor who gives the certificate, because at the end of each quarter all the medical certificates are sent up to the office and then examined by the branch which looks after that part. That branch is presided over by a medical man called the medical superintendent, and, in the case of any doubt about a certificate, the communication goes directly to the doctor who issues it, and not to the registrar.

2526. Have you to make many such references and inquiries?—Yes, quite a number. I have made out a report especially in regard to syphilis. We have been paying special attention to it lately, and, as the result of medical queries, the percentage of registration for syphilis and venereal diseases generally was increased by 12 per cent. in 1911, and in 1912 it was increased by 16 per cent. That is to say, when the certificates were first sent up they were so framed that there was a doubt about them; thereupon the office got into communication with the doctors who issued these certificates, with the result that in the one year the increase was 12 per cent. and in the other 16 per cent.

2527. Does that mean, generally speaking, that your returns do not cover all the cases, and that in the cases in which you did not make a special inquiry there may have been deaths from syphilis which never got into the records at all?—In regard to any certificate as to which there is the least doubt or apparent doubt, correspondence takes place between the medical man who issues that certificate and the general register office. Of course, I do not for a moment say that all cases of death from syphilis or other venereal diseases are certified. It is generally supposed that some of them are not, and are put down as due to other causes.

2528. I am coming to that point. Do you find in Ireland that there is a general reluctance among doctors to certify deaths from venereal diseases?—I would not say that; I would not say it would amount to reluctance.

2529. Do you think there is such an amount of bias as would lower the figures in the tables?—Yes, I think you might take that view of it.

2530. What, generally, is your opinion as to the accuracy of the figures you have given us?—It would be very hard to say definitely, but if the figures are not accurate, it would be an index to what their accuracy would be. A diagram would probably show that the yearly percentage difference between the real and recorded mortality of syphilitics was the same.

2531. That percentage would probably go back through a great many years, so that the comparison between decades may be taken as fairly accurate?—Yes, that is my opinion. I think, though, that within

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[Continued.]

the last 10, 12, or 15 years, on the whole, the death certification has been more accurate than it was previously.

2532. There has been a general improvement?—Yes, a general improvement.

2533. Your annual report shows that nearly 23 per cent. of deaths are not certified at all?—Yes.

2534. Why is that?—That is largely due to our very large rural population. If you read further on in the report, you will find there is a greater proportion than that in Connaught. It is just this, that the people do not send for the doctor until the very last, and sometimes do not send for him until death has taken place.

2535. Then non-certification takes place chiefly in the rural districts?—Practically altogether in the rural districts.

2536. And, therefore, it less affects the figures for venereal diseases you have given us, because those diseases are not so prevalent in rural areas?—Yes. But to counteract that we have medical men as registrars who, when people come to register an uncertified death, are able to find out more accurately than a layman can, the cause of death.

2537. That is to say, when there is no certificate of death, the registrar may still detect the cause of death?—Yes.

2538. That would be in the nature of a post-mortem or something of that sort, or, at all events, an inspection after death?—No; but when the friends come to register the death, the registrar is able to ask certain questions, and he may in that way be able to locate the disease. Quite a large proportion of these deaths are of very old people.

2539. Still, it does look as if that very large proportion of uncertified deaths must, to some extent, vitiate the value of your figures?—I quite agree.

2540. Have you devoted any special attention to the incidence of venereal diseases before you knew you were going to be called before this Commission?—Yes; because before I took up the position of Registrar-General, I was a practising physician in Dublin, and was also attached to one of the large hospitals.

2541. So that you have some special knowledge of the diseases in question?—Yes.

2542. Turning to the first of the tables you have given us, in which the classification of diseases is set out, I see that phagedena is recorded from the year 1881 onwards, but is not recorded in the last two years?—That means there were no deaths registered as due to it in 1911 and 1912.

2543. It is still included in your classification?—It is still included in our classification.

2544. Then I see that you did not begin to record locomotor ataxy until 1901?—That is so.

2545. Why was that?—There was a change in the year 1901 to the nomenclature of the Royal College of Physicians of London, 1896, in which a special line of locomotor ataxy first appeared.

2546. But I see in the returns prepared by the Registrar-General of England and Wales, these two diseases (locomotor ataxy and general paralysis) were recorded before that time?—Yes.

2547. Taking your syphilis returns, the worst decennial period was 1901–1910, the last?—Yes.

2548. That shows 1,122 total deaths, which is about 70 per cent. higher than in any previous decade?—Yes.

2549. If one may say so, that looks as if there were a tendency to increase of the disease in Ireland?—Yes. But might I point out that I think the increase is more apparent than real. I said a moment ago that the increase of 12 per cent. in 1911 and of 16 per cent. in 1912 was due to direct communication with the doctors; so we might take an average increase of 14 per cent. as due to this system of direct communication with the certifying doctors. Then I do think that on the whole, during the last 10 or 12 years the certification is better looked after by the younger members of the profession than in former years. I say frankly that I think there is an increase, but, on the whole, I think it is more apparent than real.

2550. You think it is really due to the more careful recording of the causes of death?—Yes.

2551. Then locomotor ataxy appears to remain stationary; at least, there is no decrease in the number of cases?—No, there is no decrease as the population was decreasing.

2552. Taking general paralysis of the insane next, there seems to a slight tendency to increase; at least, 1912 is by far the worst year you have had?—Yes.

2553. May we take it, therefore, that there is an increase in general paralysis of the insane?—Yes, I think so. I do not think we can come to any other conclusion from figures.

2554. You have included aneurysm in this table; in the case of aneurysm there is no sign of a decrease at all and the last figure given, for 1912, is rather a high one?—You can scarcely take the figures of one year as a guide, because if you look back to 1903 and 1904 the figures were 70 and 74 respectively.

2555. Still, I think we can take it from that, that that there is no sign of decrease in aneurysm?—No, certainly there is not.

2556. Then taking this table as a whole, it certainly does not point to any decrease in the number of deaths from these diseases?—No.

2557. And may point to an increase?—Yes.

2558. In Table No. 2 you have separated the sexes, and the proportion of deaths from syphilis and other venereal diseases per 10,000 of the population is recorded. I suppose that is per 10,000 of the females, not of the total population?—Yes.

2559. And per 10,000 of the males?—Yes.

2560. Taking syphilis, the percentage in 1901–10, as you would expect from the previous table, is considerably higher than in any other decade?—Yes.

2561. And 1911 and 1912 seem to keep very near to that high standard?—Yes.

2562. Though you assure us that high standard is, partially at any rate, an apparent one?—Yes, I give it as my opinion, and I am satisfied of it.

2563. In regard to locomotor ataxy, the proportion of males is much higher in each case than of females—about three times as much—which corresponds pretty well with the English figures, I think. The same holds good of aneurysm; females suffer very much less from aneurysm as a cause of death than males?—Yes, and the same is true in regard to general paralysis of the insane.

2564. In Table No. 3 you deal with the number of children under one year old dying from syphilis per 1,000 births?—Yes.

2565. You can only give us the details of it for the last decade?—Quite so; and for 1911 and 1912.

2566. The last decade gives an average of 0.43 for children under three months, and a total average of 0.72 for those of all ages up to 12 months?—Yes.

2567. The following years are a little below that average. Then in Table No. 4 you give the number of deaths from venereal diseases in the Dublin Registration Area. Would you explain what the Dublin Registration Area is?—There are two areas in Dublin. In Table No. 5 you will see “Dublin County Borough,” which simply means Dublin City.

2568. We are coming to that after we have finished with No. 4?—The “Dublin Registration Area” means Dublin County Borough plus certain suburbs, certain townships. We have a number of suburbs surrounding the town, and the registration area includes not only the city, but the suburbs.

2569. Have you any idea what proportion of the population is in the suburbs?—Roughly speaking, the population of Dublin City would be about 300,000, and of the suburbs about 100,000.

2570. But I suppose these suburban people are much less likely to produce these cases than the purely urban population?—The greater proportion of the suburban people are pretty well off. Of course, there are slums in the suburbs; but on the whole, I think you may take it that the people living in the townships are better off than those in the city.

2571. The greater number of these cases occurs in the urban area?—Yes.

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2572. When you say "deaths from venereal affections" will you tell us what you include under that head?—That includes the first two diseases in Table 1, syphilis, gonorrhœa and phagedena.

2573. Not the other diseases?—No, not locomotor ataxy, general paralysis of the insane, and aneurysm.

2574. The total death rate worked out for the decade in the Dublin registration area is 1·40 per 10,000?—Yes.

2575. Taking Table No. 5, it is clear that the Dublin County Borough stands pre-eminent in the incidence of these diseases?—Yes.

2576. You have a ratio of deaths from syphilis of 1·47, and practically each of the other diseases seems to be almost as high?—Yes, correspondingly.

2577. Abnormally high?—Yes, abnormally high.

2578. That is due to the fact that there must be a great deal of this disease in Dublin City?—Yes, I do not think that can be controverted; but it is also due to some other facts: first of all, Dublin is a seaport town; secondly, it is a large military station; thirdly, we have an asylum in Dublin which provides not only for the city of Dublin, but also for County Dublin, County Wicklow, and County Louth; so that the death-rate from locomotor ataxy, general paralysis of the insane, and aneurysm is higher than in Belfast.

2579. That would not affect this first column of yours?—No, it would not affect the first column.

2580. Which stands at 1·47 per 10,000?—These figures compared with Belfast are higher, but Belfast Asylum deals only with Belfast City. There is an asylum for County Antrim and another for County Down. Belfast is situate partly in County Antrim and partly in County Down.

2581. If you take syphilis alone, which is not affected by the difference of asylum conditions in these two areas, you will find that the Belfast cases are only about one-third of those in Dublin?—Yes, the number of deaths from that cause in Belfast is 20, or 0·51 per 10,000, and in Dublin County Borough 45, or 1·47 per 10,000.

2582. So that we may take it that Dublin and Belfast stand far ahead of the rest of Ireland in that regard?—Yes.

2583. If it is necessary for us to make any local enquiries for any special purpose, we might confine ourselves to those two towns, you think?—Quite so.

2584. I have had some comparative figures drawn out from the three reports of the several Registrars-General, and Ireland stands in a very favourable position—showing somewhere about half, or a little less than half, the death-rate from syphilis, and about the same, or a little less, from general paralysis of the insane. All through, Ireland seems to be able to make more favourable returns than either of the other two registering administrations?—Yes.

2585. Making a comparison of infant mortality from syphilis in 1911, England and Wales produced 1·29, Scotland 1·4, and Ireland 0·59?—Yes.

2586. Therefore, so far as infant mortality from syphilis is concerned, Ireland makes very favourable returns?—Yes.

2587. Making a comparison of illegitimate births per 100 births, England and Wales give 4·27, Scotland gives the high figure of 7·1, and Ireland gives the figure of 2·8 only; so that there is much less illegitimacy in Ireland than in either of the other countries?—Yes, that is so.

2588. Coming back to Dublin County Borough, you get there a death-rate from syphilis and other venereal diseases of 1·5, not including locomotor ataxy and general paralysis of the insane. That is so, is it not?—Yes.

2589. The corresponding figure for the county of London is 0·76, so that you have twice the death-rate in the Dublin County Borough than the county of London has from syphilis, which, you tell us, is not affected by the difference in lunatic asylum conditions?—Yes.

2590. Then taking the comparative figures for general paralysis of the insane, Dublin gives 1·53 deaths per 10,000 and London only 0·89; so, as far

as general paralysis of the insane is concerned, Dublin is in a far worse position than London?—Yes.

2591. Taking the returns of deaths from all the principal diseases in Ireland, I see that syphilis and allied diseases account for 0·78 per 10,000 of the population?—Yes, in the year 1912.

2592. Whereas tuberculous disease, which stands at the top of the list, accounts for 21·52 deaths per 10,000?—Yes, that is so.

2593. So, that relatively, as a cause of death syphilis plays a very small part in Ireland?—Yes.

2594. Are there any other figures you would like to bring to our notice than those I have dealt with?—I do not think so. I have compiled a special table, of which I presume you have a copy, showing the number of deaths per 10,000 of the population from tuberculous disease, bronchitis, pneumonia, cancer, whooping cough, influenza, and syphilis and allied diseases.

2595. (*Sir Almeric FitzRoy.*) You said that the increase in the syphilis returns for the decade 1901–10 is more apparent than real. But does not the great increase in the deaths from general paralysis of the insane in 1912 tend to show that the increase of deaths from syphilis in the previous decade is substantial, and not merely statistical?—The deaths from syphilis are given in the first column of Table-No. 1, and show a great increase. In the decade 1891–1900 there were 754, and from 1901 to 1910 there were 1,122 total deaths from that cause alone.

2596. If there is an increase in the number of deaths from syphilis over a certain term of years, would you not expect to find that the deaths from general paralysis of the insane would be more numerous a few years later?—I do not know that you can say there is a certain relationship between the two. I daresay there may be.

2597. Are they not both due to syphilis? Are not they both due to a common cause—that is my point?—Yes.

2598. Therefore, the great increase in the number of deaths due to general paralysis of the insane in 1912 in my view tends to show that the increase in the deaths from syphilis during the previous decade is as much a substantial as it is a statistical one. That is my point. Would you agree to that?—Yes, apparently so from figures.

2599. Do you trace any connection between the increase of syphilis in Ireland and the increase of insanity, which, as everybody knows, is stupendous?—It is a fact that insanity has considerably increased.

2600. I do not know what the latest statistics may be; but in 1901 the lunacy rate was 1 in 178; in 1881 1 in 281, and in 1851, 1 in 657, showing an enormous increase in 50 years?—Yes.

2601. Has that increase been continued in the last 10 years?—Yes, I am afraid it has.

2602. What is the present rate?—I cannot give you the figures, but I will get them for you; the rate in 1911 was 1 in 154.

2603. The increase is progressive?—Yes.

2604. Do you think there is any close connection between feeble-mindedness and syphilis?—I think it is a recognised fact by all experts in lunacy that there is a certain relationship between syphilis and lunacy.

2605. (*Sir Malcolm Morris.*) What are the actual causes of death in infantile syphilis? Are the defective lesions which cause death returned?—I rather think not; just syphilis.

2606. Infantile syphilis is simply put down as the cause of death, without giving any other description of the actual cause or causes?—Yes, I rather think so. However, I would not say definitely; I will make inquiries.

2607. It is of very little use recording the mere fact of death from infantile syphilis, is it?—It is from one point of view; but not for the mortality rate for syphilis.

2608. Unless the particular lesion which actually causes death is specified?—Yes. If it is of any use to the Commission, for 1912, at all events, I can segregate some of the causes.

2609. Supposing a certificate simply gave syphilis as the cause of death of a child under one year old,

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would your officer write to the man who wrote the certificate asking him for further details as to the exact mode of death, or would he be content with the word "syphilis"?—I should say he would be communicated with.

2610. He would be?—Yes, I should say so. I will have that return made out, if you desire it, and produced to the Commission, for one year at least.

(Chairman.) If you will, we should be obliged.

2611. (Mr. Lane.) From these figures, we may take it that the mortality from syphilis is very small in Ireland?—Yes, because these are the actual figures from our returns.

2612. We have been told that syphilis is responsible for as much evil as cancer or tuberculosis. These figures do not show that?—Not in Ireland.

2613. Might not a number of these cases of cancer have been induced by syphilis?—That is possible.

2614. It is computed that 80 per cent. of the cases of cancer of the tongue occur in syphilitic subjects?—Yes.

2615. And are due to previous ulceration?—Yes.

2616. But there would be no indication in those cases of the incidence of syphilis?—No.

2617. Though, really, syphilis would be the cause of the cancer, and indirectly the cause of death?—Yes.

2618. Then the same may be said of tuberculous disease. There is no doubt that syphilis would rather conduce to tuberculous disease by lowering the vitality of the subject?—Yes, that is quite true.

(Mrs. Creighton.) I have no questions to ask.

2619. (Mrs. Scharlieb.) Are we to understand from Table No. 2 that no women died of gonorrhœa or its effects between 1881 and the present time? Are there no cases of salpingitis or other cases of internal suppuration due to gonorrhœa and leading to death?—In Table No. 1 there are deaths from gonorrhœa given.

2620. They are not marked in this Table No. 2 for the women, under the head of stricture of the urethra and gonorrhœa. Stricture of the urethra would not occur in women, but the consequences of gonorrhœa would?—As a matter of fact, the correction has gone up in that case. In 1911 it should be 0.004 and in 1912, 0.004, instead of 0.00 and 0.00.

2621. It is not here?—No, it has only just gone in.

2622. But it does occur there just as it does occur here?—Yes. I am sorry, my Lord, there is some slight correction in Table No. 2, in the rate at which stricture of the urethra occurs in 1911. It is 0.02, and in 1912, 0.01.

2623. (Chairman.) Then there were deaths?—Yes; Table 1 gives number and Table 2 gives rates.

2624. (Canon Horsley.) Will you give me the illegitimate births in Ireland per 1,000?—In the ten years 1902 to 1911 it was 2.6 per cent. of total births. In 1903-12 it was 2.6, and in 1912, 2.8.

2625. That is only a half of England and about one-third of Scotland?—Yes.

2626. Can you contrast Connaught and Ulster in different divisions?—Yes.

2627. You can give them separately?—Yes, I will give you this table. There are two 10-year periods.

2628. Connaught is 0.7 and Ulster 3.5. I am afraid the Scottish element is obvious in Ulster. Do you keep North-east Ulster separate from the rest of Ulster?—No.

2629. Ulster is remarkable in Ireland as the only division in which the number of women exceeds the number of men?—Yes.

2630. In all the others there are more men than women?—Yes.

2631. With regard to the deaths from all syphilitic disease, apparently the males are 236 and the females 103. That is for the last year?—Yes.

2632. The men are more than double the women?—Yes, that is throughout all the figures and throughout the computations.

2633. Your figures show very plainly that these diseases are mainly urban?—Yes.

2634. Do not they also show a sort of outburst at the opening of the 20th century. Nearly all the figures begin to be worse in 1901?—Yes.

2635. Is there any reason for that?—No, I cannot give any reason for it, but it is to be remembered that the system of querying unsatisfactory causes of death was originated in 1901.

2636. Was there any fresh system of registration?—No, the registration has not been altered in any way.

2637. There seems to be an outburst marking the opening of the century. Then as to the deaths from venereal disease, all the deaths, except 135, come from Dublin. The whole of the deaths are 339, out of which Dublin accounts for 118. Taking Dublin and the county borough together, there are 135 out of 339 for the whole of Ireland?—Yes.

2638. That, of course, is a very large proportion?—Yes.

2639. (Dr. Scott Lidgett.) Can you account for the almost total immunity of Cork City which is shown on this table; I see there are only two deaths from syphilis. Is the registration completely accurate in the south of Ireland?—The larger the town the more accurate it is.

2640. Because Cork is a military centre as well as a port?—Yes, but it is neither as large a military centre nor as large a port as Dublin.

2641. Still, this is phenomenally low, is it not?—Yes.

2642. May we take it that the registration in Connaught is also complete. I see for a number of the counties there is no case of syphilis entered?—Yes.

2643. May we take it it is quite complete?—Of course Connaught is a place above all others where there is a large number of uncertified deaths, and that must be taken into consideration. Then Connaught is essentially a rural part of the country.

2644. (Canon Horsley.) A part from which, the young men rather than the old men emigrate?—That is so. Another point that probably affects these figures is that we have not an asylum for each county. The smaller counties are united. Sometimes two or three are united for the purpose of one asylum. That may account in some counties for there being no deaths registered from locomotor ataxy, general paralysis of the insane, or anything of that sort.

2645. (Dr. Scott Lidgett.) Is there no asylum in Cork?—Yes, there is. There are seven cases registered there from general paralysis of the insane.

2646. (Sir J. Collie.) In view of the enormous number of deaths from general paralysis of the insane, tabes, and disease of the aorta, and so on, I suppose really those figures under the head of syphilis do not give us any true idea of the prevalence of syphilis in the community?—No. Of course, we only deal with actual deaths.

2647. I quite understand. I only wanted to bring that point out?—We can scarcely say from the deaths from syphilis that there are a certain number of people suffering from it.

2648. Of course you only tabulate those statistics that come to you where the people have actually died of acute disease?—Yes.

2649. They are rare compared to the large number of deaths that occur from secondary disease due to syphilis?—Yes.

2650. (Mrs. Burgwin.) With regard to Connaught, is it not a fact that the young people emigrate from there, and that the average age in Connaught would be very very different to that in the east of Ireland?—Yes; the emigration is greater from Connaught than any other part of Ireland.

2651. Is it not also a fact that those who are left in Connaught who are young, marry very young indeed?—Yes, I think so.

2652. So that you would have the religious and neighbourly supervision, as it were, of those?—Yes.

2653. And that possibly would account for your very splendid statistics?—Yes, quite so.

2654. (Dr. Newsholme.) I gather you attach a very considerable importance to the fact that the dispensary doctor is the registrar for each dispensary area?—We have been doing that.

2655. You think that is a very good system?—It has been so since we recognised registration in 1864, and we have no reason to find fault with it.

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2656. Do you think it in any way increases the accuracy of the certificates received, or gives any check upon them?—I do not suppose it does, because as a rule the doctor who certifies gives the certificate to the deceased person's friends, and the friends come and register. Although he is a doctor, he is not supposed in any way to interfere with the certificate, and ultimately the certificates come to us.

2657. The dispensary doctor himself is a practitioner among a number of other practitioners?—Quite so.

2658. And if he were to begin to ask questions about the accuracy of the certificate, I take it he would get into trouble with his brother practitioners?—Yes.

2659. And I take it he does not do so?—No.

2660. Then with regard to the 23 per cent. of deaths which are uncertified by a doctor, does the presence of a doctor as registrar conduce to any elucidation as to the causes of those deaths?—I suppose it does.

2661. May I ask first, does the doctor sit in his office and enter these items himself, or does he usually employ a clerk?—No; he usually does that himself. He has what is called an assistant registrar; but the assistant registrar is not supposed to work unless the doctor is away ill, or something of that sort. I should say about 80 per cent. of the work of the registrar is done by the doctor himself.

2662. As regards the death of a person who has not been attended by the doctor, does the medical registrar make inquiry into the cause of death in those cases?—I presume he does; I know that a number do.

2663. With regard to the 23 per cent., does the medical registrar enter the reputed cause on the strength of the relatives' statements?—Yes, uncertified or certified.

2664. The same thing is done in England by the non-medical registrar?—Yes, I presume so.

2665. Do you think the difference between the non-medical and the medical registrar is any advantage in that direction?—I think in the case of uncertified deaths the advantage would lie with the medical registrar.

2666. And as those are a quarter of the total in Ireland, there is something to be said for the medical registrar?—Yes.

2667. With regard to the excess of venereal disease in Dublin, I was astonished to find it so much worse on the statistics than London. You mentioned two or three possible causes of that. I was not quite clear with regard to the military aspect of it. Do you ascribe a great deal of this excess to the presence of the military there?—I do not know. It is a fact that this disease is not so prevalent amongst the military as it used to be.

2668. Yet Dublin has, I think, twice or three times as much as London?—Yes.

2669. Is there any possibility of mistakes of statistics between the registration area and the county borough figures, giving one to the other, or being left out, or something of that sort?—No, because the registers in the city are quite different from the registers in the suburbs. I do not think there would be any possibility of that. Besides they are under the direct supervision of the office; they are quite local.

2670. Then that is probably correct?—I take it it is absolutely correct.

2671. You do not think it is likely that a lot of people come to Dublin to be treated in the hospitals from the surrounding country, die in the hospitals in Dublin, and are entered as deaths in Dublin?—Perhaps I should give them as another cause; because not only quite a number of people come from the surrounding district, but they come from all parts of the country.

2672. The Dublin hospitals take people in from all parts of the country?—Yes.

2673. In England there has recently been adopted a system relegating those deaths to the districts from which the deceased persons came. Have you any corresponding system in Ireland?—We are introducing that.

2674. But it will not affect past statistics?—No, I am afraid it will not. That is one of our problems with tuberculosis.

2675. Then, in answer to a question by Canon Horsley, you mentioned the excess of illegitimacy in Ulster. We had figures from the English Registrar-General's office to the effect that the death-rate from syphilis among illegitimate infants is about eight times as high as that of legitimate infants. You have no corresponding figures, I take it, for Ireland?—No; we were unable to get those figures for you.

2676. In Ulster illegitimacy is I do not know how many times more abundant than in the rest of Ireland. But in Dublin, where there is less illegitimacy, there is a very much higher syphilis death-rate?—Yes.

2677. How do you account for that? It is contrary to the indications which might be supplied by illegitimacy?—Yes. Of course, another point is that we have a Lock Hospital in Dublin.

2678. Do you mean that that Lock Hospital is an indication that such a place is needed, or do you mean it attracts people from other areas into Dublin?—I am not able to answer that definitely. But I should say that severe cases from all parts of the country would be sent there.

2679. I think I am right in saying that a Lock Hospital usually only takes the acute cases of gonorrhoea and syphilis?—Yes. I do not for a moment put that forward.

2680. No, it is just a point?—I think what the doctors attached to the Lock Hospital at Dublin feel is, that the moment the patients get a little better they go off.

2681. There was one other point I was not quite clear about. You were asked about the table of the comparison between the death-rate of England, Scotland, and Ireland respectively, from general paralysis of the insane. In England in 1911 it was 60, as compared with 20 in Ireland. But if you compare locomotor ataxy, it is 18 as compared with 12. The proportion in regard to general paralysis of the insane is 3 to 1, and the proportion in regard to locomotor ataxy is 3 to 2?—Yes.

2682. I take it you will agree with the general opinion that both these diseases are equally due to syphilis?—Yes.

2683. That being so, you would expect, would you not, that the two diseases would be in the same proportion between England and Ireland, instead of being 3 to 1 and 3 to 2?—Yes.

2684. Therefore we have to conclude that there is something wrong either in the English figures or the Irish figures, or in both?—There may be another way of looking at it. The proportion of the number of locomotor ataxy cases following syphilis in one country may be greater than in the other country. For instance, I was speaking to one of the surgeons of our lock hospital the other day, and he gave it as his opinion that there were more cases of syphilis, but the syphilis was of a less serious form than it was some years ago.

2685. (*Sir Malcolm Morris.*) Less serious so far as its early symptoms?—Yes.

2686. Not necessarily its later symptoms?—No.

2687. (*Dr. Newsholme.*) On that we are all in the dark; it is all surmise?—Yes. Another point is, it is scarcely fair to take one year.

2688. The same point has just been suggested to me, that the figures for locomotor ataxy are probably very small. But I think if you look through the table, of which I have a copy, you will see the same inequality of proportion holds good fairly well right through a series of years?—Yes.

2689. I do not think either you or I can throw light on that; it is one of the difficult points. Then with regard to the increase of insanity in Ireland, I suppose you will distinguish between increase due to more institutional treatment being available, and increase in reality as determined by a census?—Yes.

2690. I suppose there has been a tremendous increase in asylum of beds available for the insane?—Yes.

2691. And the same difficulty arises there as in England, that is, to distinguish how much apparent increase there is from that cause, and how much real increase there is?—Yes. There was another cause,

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but I would not say this authoritatively: that is, of late years quite a number of people who were in union workhouses have been transferred to the asylums.

2692. Yes, that is another important point. Then may I put this point to you. Being transferred to the asylum from poor law workhouses, is there not a likelihood that the real nature of their disease, and the fact that there was general paralysis of the insane rather than any other form of insanity, would be more likely to be diagnosed?—Yes, that is so.

2693. When Dr. Stevenson was giving evidence before the Commission he very strongly advocated a system of confidential certification of the cause of death as being likely to lead to a more accurate statement by the certifying doctor of the real cause of death. He regarded it as improbable that any practitioner who had regard to his welfare in practice would hand over to the relatives a certificate with the word "syphilis." Do you yourself think that is a factor which works very much in Ireland?—I think it does work; but what percentage or proportion of it there is I really cannot tell.

2694. Would you be inclined to advocate a system such as this; that the doctor, instead of handing over a certificate of the cause of death to the relatives, should post it to the registrar, who would receive it confidentially and would not divulge to the relatives the cause of death under any circumstances?—I do not know how that might work out in another way, because later on a person may come in for a certificate, and he may want to search the register.

2695. That is in your office in Dublin?—No, the local office. He may, under the guise of searching for something else, look up that death.

2696. But you told me just now that all the original certificates were sent up to the central office in Dublin?—Yes, but the register contains a column "Cause of death."

2697. But if you altered the register so that there was no column "Cause of death" entered locally, and the cause of death were only known in your Dublin office, do you not think that difficulty would disappear?—I daresay it would work out, but I am afraid it would be rather complicated. I have been thinking this, the War Office and the Home Office asked for our registers of deaths, the War Office in the case of pensioners and the Home Office in the case of death from industrial disease and poisoning, and got the registrar to send the certificate to them, paying a small fee for it. It has occurred to me if a circular was sent to all doctors in Ireland saying that in the case of syphilis or allied disease, in addition to the ordinary certificate they should send a special certificate to the Registrar-General's office, it might in that way increase the accuracy.

2698. That is giving the doctor double trouble?—In the case of deaths; the doctor ought to be paid for it.

2699. I was going to suggest that by the system I mentioned just now it might be possible—I do not say it would—to do away with any additional payment. You are not giving the doctor trouble beyond what he has now except posting the certificate, and he would be very glad to post the truth rather than to state a fraction of the truth to the relatives?—Yes.

(*Sir Malcolm Morris.*) You must remember that certificate will go to a rival practitioner in the same town.

2700. (*Chairman.*) That is a very important point?—Yes, it is very important.

(*Sir Malcolm Morris.*) That is calculated to upset the whole thing.

2701. (*Dr. Newsholme.*) It is a very important point so long as the registrars are medical men. Then on the whole you have an open mind upon the question of confidential certification?—I think the point raised would not apply to Ireland.

2702. You do not think, in view of its coming to a rival practitioner?—Take a small town in the country, say with 1,000 or 2,000 of population, where there are only two medical men, one a private practitioner and the other a dispensary doctor. Even under

that system which you suggest, the certificate will come to the registrar, who is also a medical man.

2703. But after all, Sir Malcolm Morris's point only amounts to this, that the registrar gets inside an envelope what under the present system he gets outside an envelope. Is not that it?—Yes. Of course all the same it would keep the actual disease from the people's friends, and I think that is what is dreaded more than anything else.

2704. (*Dr. Scott Lidgett.*) What is dreaded?—The doctor does not want the deceased person's friends to know what he was suffering from.

(*Dr. Newsholme.*) I would like Sir Malcolm Morris to ask some more questions, my Lord, to elucidate in what way the proposed system differs from what I have just now said.

(*Chairman.*) Certainly.

2705. (*Sir Malcolm Morris.*) If the certificate were an accurate one, which it would not have been if it were an open one, a dispensary doctor would know a fact which otherwise he could not obtain?—Yes.

2706. And it is quite possible he might let that out to the relatives. Do you not think that is a risk?—Certainly.

2707. (*Sir John Collie.*) Then if it were not for the fact that registrars are medical men, you really do not see much difficulty in Dr. Newsholme's suggestion?—I do not think so.

(*Dr. Newsholme.*) In other words, you think that the local land agent or inspector of nuisances or anybody else in the district might be better trusted to keep the secret than any doctor in the area. Is that an unfair way of putting it?—Yes, it is unfair. I hold that it is an advantage for the appointments of registrar and medical officer of the district to be combined.

2708. (*Sir John Collie.*) Do you really think there would be many cases in which there would be jealousy and trouble between the doctors?—I do not think so. Of course there is always a certain amount of professional jealousy where there are only two or three medical men.

2709. So that it really would not amount to anything serious after all?—No, because I think any point that would make certification in this respect more accurate should be carried out.

2710. (*Mr. Arthur Newsholme.*) Quite. Have you any other suggestion beyond what I have thrown out, which would tend in that direction?—No. Of course the other suggestion was that the certifying practitioners themselves would communicate with the central office or send a special certificate to my office.

2711. To your Somerset House?—Yes. Of course, that would entail a special fee; but I do think as we are dealing with this it is worth while. For instance, last year there were only 339 deaths, and the special fee for that would not amount to such a large sum.

2712. (*Chairman.*) On your Table 4, I see you give 43 cases of death from venereal disease in the Dublin registration area; but on page 5 you give the Dublin County Borough, which is a very small area, as 45 cases. I do not quite understand how it is bigger?—I saw that shortly before coming here, and I had not time to telegraph to the office.

2713. There is some little flaw there?—Yes. The first part gives it for a period of 10 years from 1901 to 1910. Giving the average, Table IV, was prepared originally from unrevised figures returned by the registrars. On revision, three deaths had been added, making the number 46 for the Dublin registration area in the year 1912.

2714. Both the figures I refer to are for 1912?—Yes.

2715. There must be some little discrepancy there?—Yes.

2716. I suppose your returns show still births, do they not?—No, we take no account of still birth; our Act does not entitle us to do so. Then, after the Act, certain regulations were made which were approved by the Lord Lieutenant. In the case of still births there is no notice of it; but if the child has lived for a moment, then it has to be registered as a birth and a death. Otherwise our Act is quite specific on that point.

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Sir W. J. THOMPSON.

[Continued.]

2717. With regard to the asylum you have spoken about for Dublin, do you think we might get any figures of value from the asylum authorities?—I think you could get very valuable figures from them.

2718. Do you happen to know whether their records are complete and well kept?—I think they are exceptionally well kept; because up to a few years ago Dr.

Norman, who was very keen on all this sort of work, was superintendent for quite a number of years, and he brought it up to a very high state of perfection. I think it is the asylum above all others that you would get information from. The present superintendent has followed in his steps.

(Chairman.) Thank you very much.

The witness withdrew.

NINTH DAY.

Monday, 15th December 1913.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES, K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mr. PHILIP SNOWDEN, M.P.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Mr. JAMES ERNEST LANE, F.R.C.S., called and examined.

2719. (Chairman.) You are the senior surgeon of St. Mary's Hospital, and senior surgeon of the London Lock Hospital, are you not?—Yes.

2720. You are also a member of the Court of Examiners and of the Council of the Royal College of Surgeons of England?—Yes.

2721. You have had special experience of this class of disease, extending over a considerable time?—Yes, for certainly 25 years.

2722. Have you been on the staff of the Lock Hospital all that time?—I have been on the staff all that time, and before I was on the staff I did a considerable amount of work there, and was assistant house-surgeon at the Female Lock Hospital when the Contagious Diseases Acts were in force for a short time.

2723. You have published and read several papers on this subject, I think?—Yes, I have.

2724. Among them is this paper you read at the Medical Graduates College and Polyclinic and at the Eugenics Education Society?—Yes.

2725. Turning to that paper first, I see you say that in the year 1899, a memorial was presented to the Governments of England and Ireland by the British Medical Association, expressing a hope that some investigation of this kind might be made?—Yes, that was so.

2726. That was the view as long ago as 1899?—Yes.

2727. The official answer at that time was that public opinion was not sufficiently enlightened on this important matter for any action to be taken in the desired direction?—That was the answer.

2728. Do you think we are in a better position at the present time, from our greater knowledge, to deal with it, than we were in 1899?—I think we are in a better position because the public is rapidly becoming more enlightened on the subject. But the necessity existed in 1899 in the same way as it does at the present time.

2729. You tell us in this paper that although large numbers of subscriptions are given to the cause of combating other diseases, nothing is being done, or has been done, at the present time to combat venereal diseases?—No, public money has never been expended except in carrying out the Contagious Diseases Acts.

2730. Then you tell us—which is a very important fact—that you consider that venereal diseases are attended by just as great mortality as the other two, by which I suppose you mean tubercular diseases and cancer?—That is an opinion that has been expressed by others besides myself.

2731. Do you think it is an opinion that we can take as absolute, and that we can get evidence sufficient to bear it out?—I do not think so. You cannot possibly get figures to prove that.

2732. Of course if we could prove that anything like that statement was true, it would strengthen our hands very much, would it not?—It is impossible by figures to ascertain that fact. It is an opinion, however, that has been more or less frequently expressed by those who are well qualified to give their opinion.

2733. You have no doubt that the cumulative evidence which we can get from a very large variety of sources will enable us to show a very high prevalence of disease?—I think certainly it will show that.

2734. You lay stress on the fact that in the case of hereditary diseases, by which you mean hereditary syphilis, escapes recognition in a very large number of cases. Therefore I suppose you lay stress on the investigation of lunatic asylum figures and figures of that sort?—Yes.

2735. I find that you lay very considerable stress upon the possible results of gonorrhœa, which you say are very various and very serious?—Yes. The results of gonorrhœa are considerably under-estimated by the public. Gonorrhœa is looked upon as a very minor evil, whereas it may be just as grave a disease as syphilis in its after results, especially in the female sex, I think.

2736. Then you make another strong statement, that it has been estimated that 50 per cent. of all cases of sterility are due to gonorrhœa?—That is an estimation which has been made by those in a position to make a statement of that sort. I cannot put my hand on the reference at present, but I could find it for you.

2737. I think it would be useful if we had any figures which would enable us to bring that point out. Of course it is a very startling statement—that 50 per cent. of the cases of sterility are due to gonorrhœa in

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[Continued.]

some form or other. I should like to ask you one or two questions about gonorrhœa, which by the way we have not treated in much detail. Can gonorrhœa be diagnosed with some degree of certainty?—Yes, with a microscope.

2738. At all stages?—No, I would not say that. Gonorrhœa can certainly be diagnosed; but there are cases of gonorrhœa in which the germ is secreted in parts of the body which are almost inaccessible. In women certainly, the diagnosis of gonorrhœa is difficult when the germ gets into certain remote parts. In men, in the same way, there are certain organs into which the germ may penetrate and may easily escape from there, may re-infect the person time after time, and may render him constantly liable to recurrences of the disease; so much so that I know one patient who has had acute attacks during the last seven years occurring periodically, perhaps at an interval of a month, or two months; but he has never been free from the disease or from the possibility of self-infection.

2739. Is the gonococcus present in all phases of the disease?—In all phases of gonorrhœa, yes. If the gonococcus is not present, then the condition would be called by another name.

2740. In gonorrhœa proper, it is a standing feature that you would find the gonococcus?—That is the essential point of the disease—the presence of the gonococcus.

2741. Can gonorrhœa be transmitted congenitally in the same way as syphilis?—No. The only way in which it can be transmitted is by cases of ophthalmia neo-natorum; that is to say, the child is infected with gonorrhœa during its passage from the mother.

2742. So that to that extent it is congenital?—Yes.

2743. The presence of the disease in the mother can produce ophthalmia or ophthalmia neo-natorum—which is responsible for a number of cases of blindness—in a child?—Yes; that is by the direct contact of the child's eye with the mother's secretions.

2744. It is not congenital in the other sense of the word?—No, it is not.

2745. It is the result of contact?—Yes.

2746. Is the present treatment of gonorrhœa satisfactory and certain if it is taken in time?—It is a very difficult disease to treat; in many cases much more so than syphilis, and it is much less amenable to treatment.

2747. Are there any modern improvements in the treatment of gonorrhœa?—I do not think there are any very remarkable improvements of late years. It is recognised that the treatment has to be continued for longer than formerly, and that the applications which used to be made were far too irritating, and they have been modified so as to get rid of the germs of gonorrhœa as early as possible.

2748. In a favourable case, how long does the treatment last?—That is a very difficult question to answer, because the disease may be taken in its very early stages. What is called the abortive method of treatment may be used, that is the topical applications of nitrate of silver, or some of its modifications, and the disease may be cured within a week; but that is very rare indeed. More often it takes six weeks or two months, or even longer, and, of course, in obstinate cases, years.

2749. As in the case of syphilis, therefore, early treatment is of the utmost importance?—Yes, of the greatest importance.

2750. I see from this paper that in 1906 you were in favour of notification by medical practitioners to the sanitary authorities of every case of venereal disease. I gather from the paper you have given us to-day that you have rather changed your views in regard to that?—Yes, I have considerably modified them since that time. As far as I can see, notification must be without identification of the individual nowadays, and would only be of value for the purpose of collecting statistics. There is a certain prejudice against notification. People seem to think that notification means registration, and I have had communications from two patients since this Commission has started sitting. One of them says she cannot come to see me because she is sure she

would be put on the register. I tried to explain to her that there was no register; but I did not persuade her, and she has not been to see me. The other one I convinced that there was nothing in the movement at all that could possibly compromise any of the subjects of the disease.

2751. You said in your paper that it appeared to you unlikely that prescribing over the counter for venereal diseases would be any more prevalent than it is at the present time if notification were resorted to. Are you still of that opinion?—I think I am rather inclined to modify that.

2752. You now think that notification would lead to quack treatment across the counter?—I think it would, certainly.

2753. Supposing we get evidence from certain foreign countries where notification is carried out, and that evidence shows that some of the results you anticipate do not occur, would that modify at all your present view?—I do not think it would as far as this country is concerned.

2754. You think that the evidence derived from one country would not fit the conditions of another country?—I do not think so, necessarily.

2755. And that our conditions are somewhat special, and require specially delicate handling?—I think so.

2756. You say the majority of venereal cases are treated as out-patients at the general hospitals. They are rather out-patients than in-patients?—Yes; the disease is not one which requires a stay in the wards of a hospital, for the most part.

2757. Then you draw attention to the long and tedious hours of waiting which a patient may have to endure?—That applies, of course, more to a general than to a special hospital, such as the one with which I am connected. At a general hospital it is impossible very often for a patient to be seen for three or four hours, and he may lose a day's work by attending at the hospital. Therefore there is an obstacle put in the way of his getting himself cured.

2758. That is probably a very important deterrent?—A very important deterrent.

2759. The man may have to lose several working hours, and be put to great inconvenience in having to wait till his turn comes?—Yes.

2760. And that is one of the things you think should be remedied as far as possible?—Yes. I may say that at the Lock Hospital there are two evenings put aside for the attendance of out-patients, and they get a very large number on these occasions. People come when the day's work is over, and they do not lose any of their wages.

2761. I see you lay it down that every patient suffering from any form of venereal disease ought to be entitled to gratuitous treatment and medicine. I suppose you still adhere to that?—I still adhere to that. I think also he should be entitled to a Wassermann test gratuitously, and a test for the spirochete. Anything that would aid the diagnosis and lead to an early diagnosis of the disease should be at his disposal without any expense to him, if we wish to cure syphilis and get rid of the disease.

2762. That is really the principal point on which you now lay stress?—Yes.

2763. That is to say gratuitous treatment, and rendering it as easy of access as possible?—Yes.

2764. I see you also lay some stress upon providing every patient with printed instructions as to the nature of his disease, and so on?—I do very much. A number of patients going to hospitals in former days were simply given a prescription and told "Take these pills," or whatever the treatment was, "and come back in a fortnight or three weeks time." They were not told the possibilities of their conveying the contagion to others. Ever since I have had anything to do with these diseases, I have issued to every patient I have attended, whether privately or at the hospital, printed instructions; those instructions you will find in the reports of the Army Advisory Board.

2765. Would those instructions which are now used in the army be of general application?—I am not familiar with the instructions that are issued in the army.

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[Continued.]

2766. Anyhow, you think it would be possible to draw up a form of general instructions which would be acceptable to the medical profession, and which should be used in every case?—Yes, certainly; it should be made compulsory. I think.

2767. You think it should be made compulsory on the attending medical man to give his patient these things?—Yes; it must be of benefit in the long run.

2768. What public body or office should be made responsible for drawing up and issuing such a card of instructions as you suggest?—I am afraid I do not know enough about the various public offices to answer that question.

(*Chairman.*) Dr. Newsholme, would that be part of the Local Government Board's duty?

(*Dr. Newsholme.*) I do not think so, except that printed instructions would in fact have to be issued through the local sanitary authorities, and the question of whether the expense would fall upon them or upon the central office would arise. I think it is almost certain it would not fall on the central office.

2769. (*Chairman.*) At any rate, you think the Government should pay the cost of printing such instructions, which should be issued gratuitously to the doctors?—Yes.

2770. Who is to issue them?—I certainly think the Government should.

2771. You are of opinion, I think, that permission to marry should not be granted to syphilitic persons until three years have elapsed since primary contagion occurred; and in the case of gonorrhoea, not until the mucous membrane has been tested. That is rather a strong measure, is it not?—That was written some time ago, and of course we have advanced considerably since then; so possibly three years is too long a time to give; but I should say two years certainly is a necessity. Then, of course, the Wasserman reaction has come in since then, and one has now a much better guide as to when a man is fit to marry than one had before its introduction. In my opinion anybody who is going to be married, who has had syphilis, ought not to be allowed to do so until he gives a negative Wassermann reaction.

2772. Do you think it would be possible to establish in this country such a stringent regulation as that?—I think it would be very difficult; but it could be done in a measure by people whose daughters, for instance, are being asked in marriage. I think the father and mother of a girl ought to obtain a clear certificate of health from the man their daughter is going to be married to. That would not be a difficult thing to inculcate; whether the parents would carry it out is another matter.

2773. You think it would be somewhat of a safeguard if it were inculcated, and not made the law of the land?—Yes, I do think so.

2774. And although legislation is too much to expect, we might hope for something from the spread of knowledge amongst the parents?—Yes, I do think so.

2775. I see you were a member of a committee which was appointed in 1912 by the council of the Royal Society of Medicine, and that the committee reported last month?—Yes.

2776. The committee, I think, do not make any very definite recommendations at this stage; but they say: "It seems imperative that a scheme should be organised by which the general hospitals should take up the question." Has any step been taken since that committee reported to bring about that exchange of views between the hospitals?—Yes. A department has been recommended at the London Hospital, and, I believe, is now in existence. There is a special class of instruction here advertised of a course of 24 lectures on "syphilology," they call it. They do not seem to be going to lecture at all about gonorrhoea; but there are 24 lectures on the subject of syphilis, which are to be given at the London Hospital on February 3rd and onwards, at a fee of four guineas.

2777. Then we may take it that that branch of the question is already moving to some extent?—That is evidence of it. I am told the same thing is going on at St. Thomas's, though I am not sure that it is a fact.

I was talking to one of the staff of Guy's Hospital yesterday, and he said their rules prevented the admission of any case or primary or secondary syphilis.

2778. Is there any hope of those rules being mitigated at all?—I cannot say at all. I should say that in other hospitals where that rule has existed it would be rescinded. At my own hospital the rule exists but has not been observed. A good deal of the early treatment with salvarsan was carried out in my hospital under Sir Almroth Wright.

2779. This committee considered that every district should have a centre where Wasserman tests could be made free of charge, and where modern methods of treatment could be applied to venereal cases. I suppose you still consider that to be a very important thing?—I think it is most essential.

2780. And, finally, the committee lay great stress upon the need of general education in these subjects among all classes of the community?—Yes.

2781. That you still consider to be a very important part?—Imperatively necessary.

2782. Was the Lock Hospital started specially for the purposes of the Contagious Diseases Acts?—No, it existed long before they were passed.

2783. For the purposes it now serves?—Yes. I have here a history of it.

2784. (*Sir Malcolm Morris.*) It began in 1870. I think?—There was a Lock Hospital in the year 1437. The present Lock Hospital started in Grosvenor Place in 1746.

2785. (*Chairman.*) Was it called a Lock Hospital in those days?—Yes.

2786. Do you think this title "Lock Hospital," with the associations it may bring to mind of the Contagious Diseases Act, makes it unpopular?—It think it is an unfortunate title; but it is very doubtful whether it ever meant compulsory confinement in the hospital. There are other theories as to the origin of the name, which are explained by a colleague of mine, Mr. Shillitoe, in this pamphlet. He will be called before you later, I think?

2787. Yes. What classes make most use of your hospital?—They are mainly drawn from the poorer classes. In the female hospital there are a certain proportion of prostitutes and a certain number of those who are not habitually immoral, who had, perhaps, lapsed on one or two occasions, and so become diseased. There are, of course, cases from the lower theatrical classes. In the male hospital the patients are mostly artisans or small clerks.

2788. How are these people led or induced to go to your hospital, do you think? Do they hear of it and go there of their own accord, or are they advised by medical men to go?—Some of them hear of it and come of their own accord, and others are advised to do so.

2789. Looking at the figures on your first table, dealing with the male hospital, there seems to have been, in the decade you deal with, no increase in the number of in-patients?—No, there has been a decrease.

2790. There is a tendency for them to decrease?—Yes.

2791. There seems to have been a falling off of the out-patients, both male and female, in the new cases. How is that accounted for?—It seemed to start in 1909, both with in-patients and out-patients. I think it was due to the building being rather disorganised by our starting a new out-patients' department. The out-patients had to be seen in a very inconvenient part of the building, and I think that must account for some of the falling off in numbers.

2792. In the total number of attendances by female out-patients there is also, I see, a marked falling off. The year 1912 shows less of those attendances, does it not?—Yes.

2793. On the other hand, there is a very large increase in your total attendances?—Yes, each patient attends many more times than formerly. It is impressed upon them that regular attendance at the hospital will, in all probability, ensure a cure.

2794. That being really some indication that the patients are more willing to attend now than they used to be?—Yes, they are more willing and more intelligent.

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[Continued.]

2795. More intelligent and more keen to complete their cure?—Yes.

2796. In the figures for the female hospital, the average number in hospital and the average number of days per patient seem to have increased considerably?—Yes.

2797. Which is not quite the same result as in the male hospital?—They are certainly kept in much longer; but the figures of the number in hospital are increasing.

2798. In regard to the patients admitted since January 1st of this year, suffering from syphilis only and gonorrhœa only, and from syphilis and gonorrhœa combined, I note that syphilis and gonorrhœa claim an almost equal number of cases?—That is in the female hospital?

2799. Yes?—That is so.

2800. The figures are given at the bottom of the second table—for the London Ward and the Cambridge Ward?—Yes.

2801. Is it your experience that these two diseases are nearly on an equality in point of numbers?—I think the number of patients treated in hospital is approximately the same, but the ratio of gonorrhœa to syphilis is very different. There is a much higher prevalence of gonorrhœa than there is of syphilis, but the patients with gonorrhœa do not necessarily attend the hospital.

2802. I suppose before November 1910 you were unable to take in children?—There were a few children taken into the wards with their parents.

2803. But since that time you have admitted 76 children suffering from one or other of these two diseases?—Yes.

2804. In these juvenile cases, do you discriminate as to the way in which the disease has been contracted?—Attempts are always made to ascertain how it has been contracted. Of course, a large number of them are cases of congenital syphilis; but there is always a proportion of cases of acquired syphilis in young children, acquired possibly accidentally, but more often, I am afraid, criminally.

2805. I see you bring out the large prevalence of the disease in both males and females between the ages of 16 and 26?—Yes, that is the favourite age.

2806. That does not mean, of course, that there are not a large number of cases in both sexes above that age?—No.

2107. Does it mean it is between those ages that you are most likely to get the patients to attend your hospital?—That is so.

2808. They are more amenable to treatment then?—Yes, a large number of them come in from rescue homes.

2809. They are sent to you, you say, from rescue homes?—Yes, they are sent to us from a number of such institutions.

2810. The number of salvarsan injections administered this year is quite large, I see?—Yes, it is a large number; but it will be very much larger in the future.

2811. You give the average cost of an injection as 5s. 8d. at present?—That is the cost to the hospital. It is very much more at a private chemist's. I see here that the fees for neo-salvarsan are 9s., and for the old salvarsan 10s. per maximum quantity used.

2812. In the case of females, 423 injections were administered at 4s. each injection?—Yes, the dosage is not so great. The cost depends entirely upon the amount injected.

2813. You also give us some figures which show that you are really to a great extent dependent upon payment by patients?—Practically; the male hospital is run entirely by the voluntary subscriptions of the patients.

2814. Can people of the classes you have to deal with pay as much as 1l. per injection of salvarsan?—We get a very large number of patients there who can pay 1l. Some of them pay by instalments; but a very large number, as you see by the figures, find the money in some way or other.

2815. But that must mean a very heavy burden upon these poor people, if they have to be injected on an average about three and a half times?—It does.

2816. 1l. for each injection must be a very serious consideration to people with such small incomes as they generally have?—Yes, it is a very serious consideration.

2817. You say there has been a remarkable diminution in the number of prostitutes treated in your hospital, and you give us the figures?—Yes.

2818. Have you any idea why that has come about?—I have no idea, except that I think a better influence is brought to bear upon the young girls who acquire the disease, and they are sent into the hospital. The regular prostitute does not now come to the hospital with the same readiness as she used to. It must be they are treated by their own doctors, and I do not know whether the panel doctor will be called in under those conditions.

2819. At the present time the majority of your female patients are very young girls, and 15 per cent. of them are married women?—Yes.

2120. Are all those married women infected by their husbands, do you know?—It is impossible to say. I should imagine not quite all, but the large majority of them.

2821. In the last three years you say you have had 29 girls between the ages of 4 and 14 admitted to the hospital with acquired venereal disease. I suppose in most of those cases the disease was acquired innocently?—In a large proportion of those cases presumably it was. But there is a method of contagion that I can explain to you, which will account for some of these very young children becoming affected.

2822. I think you had better state that, because it is rather an important fact?—A certain superstition exists that if a man has contracted venereal disease and he can have connection with a virgin he will transmit that disease to her and himself escape free; That idea has existed for a very long time, I am afraid.

2823. You think that superstition accounts for some of these infections of very young girls?—Yes, I am sure of it.

2824. I suppose you have no idea of how a superstition of that kind could have gained credence?—No, I cannot trace it at all.

2825. Broadly speaking, your hospital has been very much improved in recent years?—Enormously improved; the male hospital is now quite a model building.

2826. But you are still able to treat only a proportion of these cases gratuitously?—That is so.

2827. You could not carry it on, in fact, if you did not make a charge to the patients?—It would be quite impossible. You can see from the amount of the donations. The maximum was in 1911, and it was 59l.

2828. There is one big donation, otherwise it is very small?—Yes.

2829. Your total expenditure on the female hospital for the year 1912 was 6,670l.?—Yes.

2830. That is the total expenditure, I suppose?—Yes, that is the total expenditure.

(Chairman.) That seems to me to be very small considering the amount of work the hospital appears to do.

2831. (Sir Malcolm Morris.) Is the hospital in debt at the present moment?—Yes, always. I cannot tell you the exact amount of its indebtedness.

2832. (Chairman.) As examiner for the Royal College of Surgeons, you have been able to realise that most candidates have very little knowledge of these diseases?—They are very ignorant indeed.

2833. Is there any movement on foot to increase the test in your examinations of candidates for degrees?—There has been this recommendation or notification. The teaching of the subject has been very inadequate, but I think there will be an improvement in the teaching, and so an improvement in the standard of knowledge. At present, however, a large number of men obtain surgical qualification who are quite incompetent to treat cases of venereal disease.

2834. Do you think we ought to take evidence upon the want of instruction in these subjects, which

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[Continued.]

would place us in a position to recommend that much further training should be given?—I think it is advisable.

2835. You lay stress on the great improvement of laboratory research. That, I suppose, is a thing you think the Government should undertake?—Laboratory research is of the greatest importance.

2836. You have made a large number of examinations; I think, in 1,000 consecutive cases of out-patients?—To see the ratio.

2837. To discover the relative prevalence?—Yes.

2838. Those examinations gave you 634 cases of syphilis, 220 of gonorrhœa, and 146 of other disorders such as soft chancre, balanitis, &c.?—Yes, those are the figures taken out for the last 1,000 cases.

2839. So that according to those figures, syphilis stands far ahead of gonorrhœa in the number of people tested?—Yes, according to those figures.

2840. You have tested also 225 patients admitted into the female hospital, and they gave 77 cases of syphilis, 67 of gonorrhœa, and 81 of gonorrhœa and syphilis combined?—Those are the figures.

2841. So that it is only in the female hospital you get the two diseases combined, is it not?—I think a mixture of the two diseases in the female sex is more prevalent.

2842. Do you think that soft chancre may have been present more frequently in combination, and therefore not observed as a special disease?—I think it must have been present in more than one case in 225; but it is not very frequently met with nowadays.

2843. In dealing with the Irish figures we came across the phagedæna. Could you tell us what it means exactly?—I looked it up in the dictionary, and I find the Greek word is *φάγεδαινα*, which is a cancerous or spreading sore which eats through the adjacent parts. That is something like a definition.

(*Canon Horsley.*) I looked it up in two dictionaries. It was used by the Greek physicians to denote cancer, and Pliny adopted it for "cancer." I gave Sir Malcolm Morris the references. At that time, of course, there was no syphilis known, so that it was used to denote cancer.

(*Sir Malcolm Morris.*) It has, as a secondary meaning, "an eating-away disease," and that is what it is used to denote at the present time.

2844. (*Chairman.*) Do you consider phagedæna is a complication of the primary syphilitic sore?—It is a complication of the primary sore, and also may complicate some of the tertiary lesions. One sees it, for instance, in severe ulcerations of the mouth or on the face or anywhere on the body, in fact. But it is far more common as a complication of the primary sore.

2845. That is the ordinary form, I take it?—Yes.

2846. Is it associated with the soft chancre?—It is to a lesser degree associated with the soft chancre.

2847. Can you give us a definition of "venereal disease"?—Venereal disease is a disease contracted by venery or immoral intercourse. That is the definition of it, I think.

2848. Then, as a very large proportion of the persons suffering from this disease have not contracted it in that way, you do not consider it is a very happy definition?—It is a misnomer in many instances.

2849. I suppose the number of ways in which the disease may be communicated is really very large?—Enormous.

2850. Could you state for our information the number of ways in which the disease is communicated from one person to another?—Are you alluding to syphilis of the innocent?

2851. Yes, syphilis of the innocent?—I suppose the most common is marital intercourse—that a husband has infected his wife some time or other after marriage. Then there are many other accidental infections, as in occupations, one of which was mentioned the other day—the glass-blowers. It is, of course, contracted very frequently by midwives, by surgeons in the practice of their profession; and may be contracted by mediate contagion, as by smoking a pipe, drinking out of a cup, or using a knife, fork or spoon, which has been used by an infected person. In olden times it was contracted by

vaccination, by circumcision, and, of course, by tooth-drawing.

2852. You heard, I think, the important evidence which Dr. Mott gave us the other day? Do you generally agree with that evidence?—Yes, I do thoroughly.

2853. You regard it as probable, then, that the syphilitic organism which produces G.P.I. and tabes may be the same, but in a modified or attenuated form, as that producing the disease proper?—A modified or attenuated form of what?

2854. Of the bacillus?—The spirochæte, as shown in some of Dr. Mott's specimens taken from the brain, is almost identical with the active spirochæte seen in a primary sore.

(*Chairman.*) Dr. Mott told us, I think, that there was a probability that the spirochæte, or the organism, or whatever you call it, might be present in these parasymphilitic diseases in a somewhat modified form.

(*Dr. Mott.*) Modified as to its virulence, perhaps. All I know is that it is indistinguishable morphologically, as Mr. Lane said, from the spirochæte found in the primary sore.

2855. (*Chairman.*) Is it your experience that the organism can accommodate itself to the repeated treatments of mercury?—In some cases it seems to do so; in others, of course, the spirochæte yields to the treatment, and in a certain proportion of cases is apparently exterminated.

2856. Do you think with salvarsan treatment it is less likely to become infective in time in that way?—I certainly think so. Salvarsan, of course, renders the spirochæte negative; it stuns it, as it were, in a very short space of time.

2857. Have you found also, as Dr. Mott told us he had, that the brains of persons who have died of a paralytic seizure contain the spirochæte?—I am afraid I have had no experience of that form of disease.

2858. You have had, I think, a very large experience of the Wassermann test. Do you think it is practically infallible if it is properly and carefully carried out?—No, I do not think it is in all stages of syphilis. I think it is unreliable in the primary stage of syphilis, and I should never resort to it. But in the later stages of syphilis I think it is almost infallible. One cannot say quite. There are occasional fallacies, but very few.

2859. On what condition does its accuracy depend?—The presence of a positive Wassermann reaction.

2860. No; I mean, on what does its accuracy depend in the technique which is carried out in connection with the test?—I really am unable to say. I do not do the Wassermann reaction myself ever.

2861. Dr. Mott said there are a vast number of people who never suffer from the disease at all, who have the organisms still in the body, which gives them an immunity from the disease in the future. In cases such as those, would the Wassermann test give a positive reaction?—If the spirochæte was present in the individual, presumably the Wassermann would be positive. We cannot speak with absolute certainty on the Wassermann reaction at present. It has not been in existence sufficiently long for us to know all about its significance.

2862. Then you think it is possible that the Wassermann test may give a positive result when the disease is quiescent?—Yes; when it is quiescent.

2863. Or it may give a positive result a considerable time after recovery as the result of treatment?—It is very difficult to say when the Wassermann test becomes permanently negative.

2864. Is there a possibility that the test might be found almost too delicate?—I think there is a possibility.

2865. Has not something of that kind already proved to be the case in regard to the tests for tuberculosis and enteric?—I believe that is so.

2866. The test is almost too fine, is it not?—I have not had much experience either of tests for tuberculosis or for enteric; certainly not of the blood tests.

2867. Have you had any experience of the Noguchi test?—No; none at all of the way it is practised in this country.

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2868. Do you know on what it depends for its validity?—I cannot say that I know the details of it; it is very like the tests for tuberculosis—for instance, the Calmette test for tuberculosis; but I am not in a position to speak on it with any authority.

2869. You do not know whether this test would be valid in the early stages when the Wassermann test seems to be ineffective?—I should think it is very unlikely from an analogy with other diseases.

2870. Then do you think as a general proposition that with the microscopic examination, and, of course, clinical observations, and the Wassermann test, the diagnosis of syphilis and syphilitic sequelæ may now be considered as sufficiently satisfactory?—It is quite satisfactory now—very much more so than it was five years ago, before the discovery of the spirochæte, and before the discovery of the Wassermann test.

2871. Practically, with the resources that science has given you, you are now able to ascertain with almost complete certainty whether the disease is present or not?—Yes, that is so.

2872. Have you come across cases of syphilis slipping a stage?—Yes. I published a certain number of cases in which the primary stage was absent. All these cases appeared in members of the surgical profession, presumably during the performance of an operation, and the only explanation is that the skin was punctured, and the spirochæta entered directly into the blood and affected the system in that way, and for some reason or other the skin at the point of breach of surface was not inoculated. These cases were recognised some time ago as syphilis *d'emblée*, as they were called in French, but a better name is cryptogenic syphilis, that is, syphilis of which the origin is unknown.

2873. Then you think it is probable, if the blood is directly infected, and the skin is not infected, the disease may skip a stage?—Yes, the primary stage is absent; there is no chancre.

(*Sir David Brynmor Jones.*) I feel somewhat of the same embarrassment that I felt on being asked whether I would examine Dr. Mott. I regard Mr. Lane as a judge rather than a witness.

(*Chairman.*) Still I think it is an advantage to the Commission as a whole to get hold of Mr. Lane's almost unrivalled experience; and the best way of getting it from him is to put him in the witness box.

(*Sir David Brynmor Jones.*) Then, to ask by way of information, and not by way of challenging opinion, is perhaps the right course. I asked Dr. Mott whether the spirochæte was a cell?—No, it is not a cell, it is what is known as a spirillum, that is an organism somewhat of a corkscrew shape.

2874-5. I have been reading a work of a biologist which says "the word 'cell' came later to be extended to all living units as shown by the microscope"?—Then this is a form of cell which is known to us medically as a spirillum.

2876. You say a form of cell. Does that mean that this little organism is to be subsumed logically under the term "cell"?—If the authority you quote says so, I am not in a position to deny it.

2877. It is Dr. Moore, Professor of Bio-Chemistry at the University of Liverpool, and a Fellow of the Royal Society?—I have not a word to say against him or his opinion.

2878. The reason I am asking that is this: supposing the spirochæte is a cell, is it clear that the cell might not live in the atmosphere? I am now asking for information; I am not challenging anything. The human being is simply an organised aggregate of cells, as I understand?—Yes.

2879. We live in an atmosphere which is a mechanical mixture of certain gases, no doubt containing material particles, and, it may be organic particles as well. Is the spirochæte a kind of cell that will exist in the atmosphere?—No, the spirochæte does not exist in the atmosphere, because it is what is known as an anaerobic bacillus, that is, it does not flourish in the air; it flourishes deeper in the tissues. There are other organisms which are borne in the air such as the tubercle bacillus, which is very commonly found in the air, and in dust.

2880. Is the tubercle bacillus a cell?—In the same way as the spirochæte is a cell.

2881. Only in the same way?—That is all.

2882. Why does that organism live in the atmosphere, whereas the spirochæte does not, as I gather from your view?—I cannot explain why one germ is aerobic and the other is anaerobic. It is a fact, but I cannot explain why.

2883. Then may one take it that, supposing you have a lot of syphilitic patients in all stages of the disease, the mere entering into the same room or ward where they are being treated does not render you liable to any infection?—I think it is absolutely impossible.

2884. Then, as I understand, supposing the theory to be that the chemical or biological, or medical cause of this disease is the presence in the human frame somewhere of several of these little organisms called spirochætes, I should like to ask you this. Supposing a man has in his organism, without any visible evidence, a spirochæte, and he has connection with a woman who has in her system no spirochæte, and a child is the result, is it possible that that child may be syphilitic in the sense that when it is born there is a spirochæte somewhere or other in its organism?—That is a difficult question to answer. For a man to transmit syphilis, the spirochæte must be present in his system, and he will probably transmit the disease to the child and the mother if he has still got any active spirochætosis or spirochæta about him.

2885. Why?—I cannot tell you why, but the disease is transmitted in that way. It is one of the ways in which hereditary syphilis is contracted.

(*Dr. Arthur Newsholme.*) But the spirochæte is found in the body.

2886. (*Sir David Brynmor Jones.*) That is rather a *petitio præceptio* when you say hereditary syphilis is contracted. My question is directed to discovering how, according to logical scientific notions, it can be contracted?—How it may be transmitted.

2887. Not being a doctor, as I have said more than once, I may make errors in my use of the terms; but supposing a man has had syphilis in a very marked form, a bad sore followed by inflammation, and things of that kind, and then he is cured and marries, supposing there is no lesion or abrasion or anything of that kind in the organs of generation, either in the husband or the wife, can the spirochæte be transmitted to the offspring?—Certainly.

2888. How?—Probably through the male secretion.

2889. I see. Then it must be in the process of the development of the fœtus?—Yes, during the process of fecundation I think we should call it.

2890. I remember the term now. So that, besides what may be called the germs or cells which go to form a new living organism, these other little micro-organisms—I will not use the word cells, as you do not like it—may at once enter into the very being of the new existence?—Yes; that is what we must assume.

2891. Do you think those theories are capable of anything that would be called by scientific men demonstration?—I should think it is almost impossible to demonstrate the fact.

2892. (*Chairman.*) May I take it the point would be that in the infant which had got this disease the spirochæte would be found?—Yes.

2893. And having found the spirochæte in the infant, you would say at once that is a case of hereditary transmission, proved by the presence of the spirochæte?—Yes.

2894. (*Sir David Brynmor Jones.*) Have you examined any fœtuses with a view to discovering the spirochæte?—I cannot say that; I am not devoted to scientific work of that sort. I am a practising surgeon, and one cannot give time to pathological investigations of that sort.

(*Sir David Brynmor Jones.*) I am not attacking you in any way; I am only trying to find out what the real thing is.

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(Dr. Mott.) May I say I have examined a great many, and found hundreds in the organs of fetuses.

(Sir David Brynmor Jones.) How do you discover that—by the microscope?

(Dr. Mott.) Yes. They are exactly the same as you see them in a primary sore. You cannot distinguish them, only they are more abundant.

(Sir David Brynmor Jones.) You mean to say that under the microscope this organism always has the same shape?

(Dr. Mott.) Yes.

(Sir David Brynmor Jones.) Why is it when you see cells, they always look different shapes in the diagrams one sees, with slight variations.

(Dr. Mott.) There may be slight variations, but the form is always the same.

(Sir David Brynmor Jones.) Yes; but this question of slight variations may be very important when you come to real demonstration.

2895. As I understand, you are against notification still. I have been reading the most interesting address that you gave?—Yes; I was rather in favour of it at one time. But my views have been considerably modified in the course of seven or eight years since I wrote that paper.

2896. As I understand, the benefit of notification in the case, we will say, of typhoid, is this: I suppose the disease called typhoid also depends on some germ or bacillus, or whatever you call it?—Yes, the typhoid bacillus.

2897. The benefit of notification there is this, that the poisonous or injuring germ comes from water or milk, or something like that, so that the benefit of the notification is that the officer of health, say, is put on his guard, and the thing may be traced to its source?—Yes. Of course the two diseases are very different. Typhoid requires treatment in hospital, whereas syphilis is much milder and a more chronic disease, which can be easily treated without the patient being confined to bed for a day.

2898. The point of my question is this, as to the means of preventing it. Supposing you find in a village typhoid is prevalent, as I understand it a little investigation shows what the cause was. It may be bad water, water with the typhoid germ in it, or something of that kind, or milk. Is not that the case?—Certainly.

2899. Then the mere notification of syphilis in a place, or among a class of people, would not have the same benefit?—I do not think it would be of any benefit except from the point of view of figures.

2900. From a statistical point of view, to show the extent of it?—Yes.

2901. Have you thought whether there are any means, by adopting methods which have been suggested by yourself and others, of preventing the further spread of syphilis?—The only means which appear to be available at present are the better treatment of the disease—efficient and early treatment—and the education of the practitioner so as to enable him to be in a position to treat the cases properly.

2902. There is, I gather, an anti-toxin treatment in the case of certain diseases, is there not?—Yes, there is, but not in the case of syphilis.

2903. The anti-toxin treatment is based, is it not, on getting a serum from a vicarious animal, or something like that? I do not know whether I use the proper terms?—Yes.

2904. There is no suggestion on your part that syphilis could be dealt with in that way?—It has been tried on many occasions. Serums have been made, principally from horses' blood, I think, but the treatment has never been satisfactory at all.

2905. Are there traces of the spirochæte in any of the ordinary animals?—In the monkeys inoculated in Paris at the Pasteur Institute the spirochæte was identical with that in the human being.

2906. Are the effects on the monkey the same as on a normal human being?—Yes, exactly the same.

2907. And you cannot get any anti-toxin through the monkey?—No; none has been obtained.

2908. Has anything like inoculation similar to vaccination been thought of?—It has been thought of, and, I believe, tried.

2909. Without success?—Without success.

2910. Do you hope that further research might lead to better results?—Yes, I certainly hope so. We are advancing, and have advanced very rapidly in the last five years, and there is no reason why the advance should not continue.

(Sir David Brynmor Jones.) Those are all the questions which occur to me which, as I have said, I simply ask by way of getting information, and not by way of challenge.

(Sir Kenelm Digby.) I have no questions to ask.

2911. (Sir Almeric FitzRoy.) With regard to what you say about the cost of salvarsan, which you stated to be 5s. 8d. per injection, is there any chance of that being reduced in the future?—I do not think so at present. That is the lowest price at which it can be got by any hospital.

2912. Do you ever read the "British Medical Journal"?—Once a week.

2913. I want to refer to an article in that journal of November 22nd, in which it was said that the retail price of a dose of salvarsan used in the army, in the current catalogue of a firm of pharmaceutical chemists is 8s. 6d. net, which is less than what I think you mentioned as being the ordinary retail price?—I got that retail price from a big chemist, who gives me these figures and puts under them 40 per cent. reduction.

2914. Upon the 8s. 6d.?—Yes; that is the nominal price. A maximum dose of neo-salvarsan is 9s., and of old salvarsan 10s., less 40 per cent. It would come out at 6s. for the old salvarsan, and 5s. 8d. for the other, which are the prices I mentioned.

2915. (Mrs. Creighton.) What is the cause of its great expense?—It is extremely difficult to prepare. It has to be prepared by very scientific men in silver crucibles. Every dose has to be carefully sterilised, and has to be carefully weighed, and is passed by the firm of Meister, Lucius & Co., who give a guarantee with every dose they send out; and as a matter of fact there is very little profit made out of it.

2916. (Sir Almeric FitzRoy.) Can you inform the Commission what the expense of the Wassermann test is?—It depends entirely on the person who makes it. The charge depends entirely on the individual. It can be done for two guineas; but I have been charged as much as 10 guineas for the test.

2917. But is not there some minimum which is the lowest possible?—I believe at the Wassermann Institute it is done for one guinea.

2918. That is the actual cost, you mean?—That is the charge made to the patient.

(Sir Almeric FitzRoy.) I want to get at what the actual cost is.

(Dr. Mott.) The cost is nothing practically.

(Sir Malcolm Morris.) It is a charge for skill.

2619 (Sir Almeric FitzRoy.) You referred just now to the action of the London Hospital in providing a special department for the treatment of syphilis. That action was taken, I believe, on the report of a sub-committee of the Out-Patient Committee, presided over by the chairman, was it not?—Yes, Mr. Goetz.

2920. In that report it is stated that from an examination of the blood of 300 adult corpses, with the aid of the Wassermann test, the committee came to the conclusion that about 12 per cent. of the population of London might be supposed to be infected. Do you concur with that estimate?—I should think that would be correct.

2921. Does your practice and experience lead you to corroborate it independently?—I could not say that I could fix upon any one particular figure; but I should think that is about the proportion. It is impossible to say; it is only a surmise of that committee.

2922. In that same committee's report they also declared their opinion that "Compulsory notification" is no good; it tends to secrecy. The man or woman "who knows that the doctor must notify the disease" will keep clear of the doctor and go to the quack." That is your opinion?—Yes.

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2923. But supposing you penalised the practice of a quack at the same time, then notification might become of some value?—I think it might be valuable in so far as it would give you figures; but it would not cure the disease.

2924. No; but is not the object to secure immediate treatment?—Yes, that is so.

2925. And would it not do that?—It is possible that it would.

2926. Is it not reasonable to suppose so?—No. I think a lot of people look upon notification with suspicion.

2927. Quite so; we have to get over that, have we not?—If we can.

2928. Is it not the case that at the first introduction of the Notification Act, the same prejudice was entertained about the notification of zymotic diseases?—I do not know.

(*Sir Almeric FitzRoy.*) I have seen it stated that it was. I daresay Dr. Mott will confirm it.

(*Dr. Mott.*) I remember it.

2929. (*Sir Almeric FitzRoy.*) And if it has been got over in one case, why should it not in the other?—There is a peculiar reluctance on the part of persons with venereal disease to let it be known in any possible way. They think the news that they are suffering from venereal disease might possibly get out.

2930. Are not we engaged in dissipating that reluctance if we can?—I do not know that we are at the present moment.

2931. Is it not the object of this inquiry, amongst other things, to do so?—I do not know that notification has been very prominently put before this inquiry.

2932. No; but to dissipate the reluctance to come up for treatment?—Certainly, that is the object.

2933. That is the point. Notification is merely a secondary step?—Yes.

2934. (*Sir Malcolm Morris.*) You have had a long experience of the treatment of syphilis by mercury and various preparations?—Yes, I have.

2935. Can you say that as the result of the treatment by mercury certain individuals have actually been cured?—I think I may say so positively.

2936. What test before the introduction of the Wassermann would you use on which you would found the belief that those persons are cured?—There was really no test except the length of treatment, and the period of immunity from symptoms.

2937. And also the fact of having healthy children?—Yes; of course when they were married, the fact of having healthy children. From that one would infer that they had been cured by mercury.

2938. And you know of many cases in your experience in which perfectly healthy children have lived after one or other or both the parents have been treated with mercury?—Yes, numbers of cases.

2939. And cases in the third generation?—Yes, I have come across a few.

2940. In your own personal experience you have seen grandchildren of people whom you know have been treated by mercury?—Yes.

2941. And who have been perfectly well?—Yes, perfectly.

2942. So, therefore, from a practical point of view, you would say that syphilis is a curable disease?—I should, certainly.

2943. You do not agree with the people who are stating just now that no matter what method of treatment is used, syphilis is not a curable disease?—I do not at all agree with that.

2944. There has not been enough time during which there has been the use of salvarsan, but do you think there is a reasonable possibility that that will increase the numbers who might legitimately marry and have offspring who would be perfectly healthy?—I have no doubt about it.

2945. Why have you no doubt about it?—Because I have seen cases of syphilis cured by salvarsan, plus mercury. You are not alluding to salvarsan alone?

2946. No. My point was that it would increase the probability of a greater number of healthy children being turned into the world if salvarsan were carried out in addition to mercury?—Certainly.

2947. You do not agree with salvarsan by itself?—No, I do not.

2948. You agree with it with mercury?—Yes.

2949. Therefore it would follow that the work of the Commission is a legitimate work if we can believe that the future generations will be born healthy and well if proper treatment is carried out?—Yes, that is my view.

2950. As regards gonorrhœa in males, is it not common enough to get orchitis following gonorrhœa in males?—Epididymitis?

2951. Yes; it is a question of words. Is epididymitis in males a possible source of sterility?—A very, very frequent source.

2952. This particular source of sterility has not been mentioned before the Commission, as far as I know?—It is, of course, when both epididymes are attacked.

2953. And it is a source of sterility; so that there is a source of sterility in men as well as a source of sterility in women?—Yes, certainly, from gonorrhœa.

2954. What scheme would you suggest as being the wisest course to pursue in the stopping of quackery in the early treatment of these two diseases?—I think that quackery ought to be penalised, so that that would act as a deterrent, and it should be heavily penalised.

2955. When you were doing out-patient work at the Lock Hospital, which you did for a considerable number of years, was it not a fact that a very large percentage of people had been treated by chemists or by quacks before they came to you?—Yes, a large number.

2956. Therefore it is a matter of very considerable importance that that should be curtailed?—Yes, I think so.

2957. Do you think it would be an advisable thing that a board or some sort of commission should be appointed which would permanently advise the Local Government Board or other body that may have to do with this from time to time, as to the advances that take place in this department?—I think it would be well to have a central advisory board of that kind.

2958. What would you suggest on the question of one of the patients at the hospital or in private, knowing he had the disease and transmitting it knowingly to other people?—I think if that could be proved it ought to be treated as a criminal offence, and very severely punished.

2959. I have only one other point about the question of educating medical students. What plan do you suggest should be carried out?—I do not think any plan can improve on that of the London Hospital, that is, a special department for in- and out-patients, and special instruction.

2960. Special teachers appointed for the particular purpose?—Yes.

2961. So that individual men should be taught exactly on the same lines that the men in the army are now being taught?—I think so. I am afraid it would entail a good deal of extra work on the students.

2962. As a corollary to it, there would be a proper and efficient examination, so that men should not go out absolutely lamentably ignorant of these subjects?—Yes. I think some of the examiners would make a point, as they do now, to a certain extent, of examining on these subjects.

2963. Do you think it would be an advisable thing in the large hospitals of the country, that more night clinics should be established in order to encourage the working classes to come for treatment?—I think that is a necessity for efficient treatment.

2964. Do you think there would be any actual difficulties raised by the boards of the large hospitals in the country to night clinics?—You say in the country?

2965. I mean the big hospitals throughout the country?—I do not see why any big hospital should object. I should think the objection would not be insuperable. It would entail a certain amount of expense.

2966. Extra expense?—Yes.

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2967. Do you think it would be a good thing, and very well worth considering?—Yes, certainly.

2968. (Mr. Philip Snowden.) Is your practice now exclusively or mainly connected with diseases of this character?—Not exclusively; I am a general surgeon.

2969. But I take it you have had a very wide experience of these matters?—I have had a very long experience.

2970. Then, basing your opinion upon that experience and the facts and figures within your knowledge, would you say that this class of disease is more prevalent than it was, say, 20 or 30 years ago, or more?—I should say somewhat less; but it is very difficult to speak of that with certainty. As regards the degree, it is of course not nearly so severe as it was.

2971. To what would you attribute the less severity in the nature of the disease?—I think the better education with regard to the disease, better hygienic surroundings of the working classes, and more open air spaces for exercise.

2972. You think these things have had an effect upon the moral character of the people, and that has expressed itself in a less prevalence of this disease?—Yes, I think so.

2973. Is it your experience that a very large number of people who suffer from these diseases do go in the first instance to quacks?—It is a very difficult thing to answer that. We get a certain number of cases who go to the hospitals after having been in the hands of quacks; but it is very difficult to ascertain which of them have been.

2974. But do you think there are as many quacks who are engaged in this business to-day as was the case 25 or 30 years ago?—I could not offer an opinion on that.

2975. I take it from what you said in reply to a question put by one of the other Commissioners, that you would be in favour of penalising quackery in this matter?—Yes, I certainly think so.

2976. Then would you prevent a man from taking whatever advice he thought was best in his own opinion in a matter of this sort?—I think it would certainly be to the detriment of the individual if, in his ignorance, he were to go to a man who could be of no use to him.

2977. It might be so; but could you point to any precedent for interference with individual liberty, and individual discretion in any thing of this sort?—No, no precedent at all.

2978. Therefore you are proposing one. You speak of the medicinal treatment to which reference is made here with salvarsan, as making it possible to render the sufferer free from the manifestations of the symptoms within three weeks. Do you mean by that that the disease is cured?—No; but the most contagious stages of the disease are cured, when he is a danger to his fellow creatures, so that all the outward signs of syphilis may be got rid of.

2979. You made some rather startling statements with regard to the number of cases that come under your observation of children and girls who have been infected with these diseases, and you said that in some cases it was your view that they had been victims of criminal assault?—Yes.

2980. In such cases as that, do you or the medical men under whose notice cases of that sort come, ever communicate with the police?—Yes; we make every effort to bring the crime home, but very seldom with success.

2981. How do you account for the fact that there is a very large increase in the number of young girls who are brought into the hospitals suffering from these diseases? If you will permit me to say so, I did not think your explanation in regard to the decrease in the number of female prostitutes who come to hospital for treatment was quite satisfactory?—May I ask in what way. I cannot explain why they do not come, but I know they do not.

2982. Can you give any reason why the number of very young girls who come to the hospital has increased?—I think there is more rescue work being

done, and it is being more efficiently done now than in former times.

2983. And that does not influence what I believe you called the older prostitutes to the same extent as the younger ones?—No; no good influence can be brought to bear on them.

2984. You have spoken more than once this afternoon about the importance of educating public opinion on this question. What steps do you suggest should be taken with that object?—In the first place, the infected person must be educated. In the second place, I think all large institutions where there are a large number of employees, or institutions such as colleges and universities, ought to have some course of lectures explaining the dangers of venereal disease. Most or many of the men who contract venereal disease have gone astray for the first time in absolute ignorance of such a disease. These are the ones who suffer, and if they were educated and told of the dangers, they would not run risks.

2985. Would you have these lecturers give a sort of public lecture, or would you have it made part of the school course or college course?—It is difficult to know how they should be carried out, but I think in very much the same way that we have learned they are carried out in the army. There is a systematic course of lectures, or lectures are given to the men in the army and the navy on the dangers that they run.

2986. Do you think that those lectures which have been given in the army and navy on the subject have really had much deterrent effect?—I think so, judging from the figures. There is very much less disease in the army and the navy now than there was.

2987. Might that not be accounted for by other reasons?—Yes, there are other reasons. But that is amongst the reasons.

2988. You have not a very high opinion of the ordinary medical practitioner for dealing with these diseases, I gather from what you have said here?—That is when they come up for their final examination. They may acquire plenty of knowledge hereafter.

2989. They pick it up as they go along?—Yes.

2990. But after they have passed their final examination, they go out into practice?—They may go out immediately into practice.

2991. I suppose that applies to the majority of the medical staff in country districts, and in the small towns in the country?—Yes; they go with very little knowledge.

2992. A large number of people come to them suffering from these diseases; and these surgeons are quite incompetent to deal with them?—In a considerable number of cases they must be shortly after they are qualified.

2993. Then that must be responsible for the aggravation of a great deal of the disease?—Yes. The prevalence or non-prevalence of the disease depends on the efficiency of the treatment.

2994. You made a rather startling proposal that a person should produce a certificate of good health before he should be allowed to marry. Has it occurred to you that that would involve a notification of these diseases?—I do not see why.

2995. I understood you to say that you would not permit a man to marry until he had been apparently free from this disease for a period of three years?—Yes, that is so.

2996. Would not that involve a notification, or at any rate registration of the disease?—I do not think it would necessarily involve that; and one cannot prevent a man marrying whenever he likes.

2997. But what is the difference between giving a man permission to marry and preventing a man marrying. What is the use of the permission unless you have the power to prevent him?—I merely give him the information for his benefit, and for the benefit of his future wife. Whether he carried out my instructions is another matter.

2998. That is a much more moderate proposal than I gathered from what you said?—That is what I meant.

2999. I understood you to say it is possible for a person to be infected with this disease by touching an

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article which has been touched by a person suffering from the disease?—Yes.

3000. In the case of infection in that way, what would be the likely manifestations of the disease in the person infected? You referred to smoking, or drinking from an infected glass; what would the manifestations be?—It would be the primary sore on the part infected, such as the lip or the mouth.

3001. (*Mrs. Creighton.*) May I ask one more question about medical education. Are we to understand that the general practitioner may go out to his work without ever having had any instruction as to the treatment of these diseases?—I would hardly go so far as to say that. Of course at every hospital there must be some instruction; but for the most part instruction on these subjects has been neglected.

3002. Does it necessarily figure in his examinations for his degree?—Yes, as a part of the general surgical knowledge.

3003. It would come in?—Yes, he is liable to be asked questions on any of these subjects, and very likely if he proves ignorant on them he would be referred.

3004. Then, as to permission to marry. I think understood you to say that what you recommended was, that the parents in the case of a man who wished to marry their daughter should demand that he produce a certificate of freedom from disease?—I think the parents should make inquiries and ascertain from him whether he is free from any possibility of infection.

3005. Would you recommend that should be the practice amongst parents?—I think it would be a very good thing. How one could carry it out I do not know. It should be a recommendation.

3006. As one of the means of educating the public, you would bring that forward before the public as a suggestion?—Yes.

3007. Supposing this disease is taken at quite an early stage, what length of treatment is necessary for a complete cure?—I should say that three years is an adequate length of time. Of course, according to evidence you will hear later, they cure syphilis in the army in a very much less time than that.

3008. Is that the same for men and women?—Yes, just the same.

3009. A woman is no more quickly cured than a man?—No, I am afraid not.

3010. Therefore when we take a rescue case, for instance, and find a girl is diseased, and send her to a workhouse infirmary, which is a very common practice, and she is sent out in a couple of months afterwards as cured, she is not cured?—No, she is not cured.

(*Sir Malcolm Morris.*) There ought to be a differentiation here between gonorrhœa and syphilis.

(*Witness.*) You were alluding to syphilis?

3011. (*Mrs. Creighton.*) Yes, I was alluding to syphilis?—Of course it was very seldom till quite recently that one could say syphilis was cured. At the Lock Hospital all the cases were sent out as "relieved." We never put "cured" after them.

3012. You sent them out as relieved, with recommendations to continue treatment?—Yes, if further treatment was necessary.

3013. Then in what stage would a girl be still infectious?—She would not be sent out if she was in a contagious condition.

3014. You mean she can be made non-contagious without being cured?—Yes, certainly.

3015. But would she, in that condition, still transmit the disease to her children?—Yes, she would.

3016. If the disease is taken early, in what length of time can the danger of infection be removed?—In a woman?

3017. Yes?—Very much the same as in a man.

3018. How long?—I should say two years would be enough, but three years to be on the safe side.

3019. I thought you said it would be a shorter time if all that one asked was that she would not be contagious?—She would not be in a position to get married merely because she was not contagious.

3020. No, I know that, but I am afraid the class of girl I was thinking of would not trouble about marriage. What I am thinking of is how one could bring pressure upon a girl who was a rescue case, for instance, not to spread infection. Can one fairly say to her that she is still in a condition for two years to spread infection?—You would have to explain in what way she was in a position to do so, because she would probably not convey it unless she became pregnant, and then she would transmit the disease to her progeny.

3021. What has led the public to under-estimate the effect of gonorrhœa?—I do not think they see so much of the sequelæ of gonorrhœa as they do of syphilis, and they know nothing about the possibility of sterility in both sexes, or that it is due to gonorrhœa, although in women it is one of the commonest sources of sterility.

3022. Is gonorrhœa more quickly cured? In some cases gonorrhœa is very quickly cured. As I say, it might be cured in a week, but it might not be cured for ten years.

3023. What you have said about the great cost of salvarsan, I suppose at present makes it a remedy which is quite prohibitive for the poor?—Unless they can get the hospitals to do it gratuitously, and of course there is a certain amount of treatment by salvarsan which is done gratuitously by every hospital, but it cannot be anything very extensive.

3024. But we could not hope, at least at present, to see it in workhouse infirmaries?—It has been done. I know of one infirmary, the Fulham Infirmary, where they have had a large number of cases done; I think over 150 is the number.

3025. Then you spoke about the infection of midwives. I suppose we may add to that, nurses?—Yes, certainly.

3026. Are they warned as to these risks, and are there precautions that they can take to make them safe?—You see the nurses are educated to some extent as to the possibilities of this, as of every other disease, and of course in a general hospital the cases of syphilis in a contagious stage are rare.

3027. But of course a midwife might deliver a woman who was in a very infectious condition?—Yes.

3028. Would the training of a midwife supply her with the knowledge to know how to guard against infection?—Yes, she would be warned; and I think one of the warnings is that they are advised to wear gloves.

3029. Are we to conclude that these absolutely innocent infections of midwives, nurses, and surgeons are frequent?—I think so.

3030. Have you any figures that give one any idea of the number?—No, I am afraid I have not.

3031. Because it is one of the points about which one hopes the statements made are very exaggerated, and it would be very interesting if one could get any idea of the number?—I am afraid I could give no information.

3032. Can persons who have acquired immunity from the disease nevertheless transmit it?—If they have acquired immunity?

3033. Immunity for themselves would mean immunity for others also, would it not?—Yes.

3034. Supposing a child was born of a parent who had had syphilis, and there was cause for suspecting that the child might have it, would the Wassermann test in the case of the healthy child give a reaction?—Yes, I think so. I think Dr. Mott is more competent to speak about the Wassermann reaction than I am.

3035. I was only thinking of these cases one hears of, of healthy children in later years developing such terrible manifestations of the disease, and I wished to know whether, if in that case it had been found out that the disease was latent, and they had been treated for it, the later manifestations could have been prevented?—I think certainly of course the manifestations of hereditary syphilis may be delayed for a very large number of years. They may not show until the patient has grown up.

3036. Yes, but if the patient has been treated early, would it be possible that those manifestations could have been altogether prevented?—I think we may assume that safely.

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3037. So that might be one of the ways by which in the future the Wassermann test might help to obviate the perils of the disease?—Yes.

3038. (*Mrs. Scharlieb.*) May I ask you a few questions with regard to gonorrhœa. I think you said that somewhere about 50 per cent. of cases of sterility in the male, and in the female, may be due to gonorrhœa?—Yes, that was the figure I used when I wrote that article some years ago. I cannot tell you what the reference is at present, but I will find it out.

3039. But we may take it roughly that it is a very large proportion, approximately 50 per cent?—Yes.

3040. That means a great loss of life to the nation?—It does.

3041. Then, next, is it not the case that a very large proportion of early abortions are also due to gonorrhœa? Of course as regards syphilis we know?—I should not like to give any opinion with regard to gonorrhœa.

3042. Of course only too frequently the uterus becomes infected, and the ovum is nourished in the infected uterus. Is it not quite likely that the disease may spread to the ovum and so produce an early abortion?—It is possible.

3043. So that there again we have gonorrhœa as a serious trouble?—Yes.

3044. Then, going a little further on in the life of the woman, is it not the fact that the original infection in her, creeps up through the uterus and through the Fallopian tubes, and very frequently induces what we know as pyosalpinx?—Yes, it is one of the commonest causes of pyosalpinx.

3045. And would you not agree that a very large percentage, perhaps 40 or 50, of the major operations on the pelvic organs of women are necessitated by some gonorrhœal infection?—I should not like to bind myself to any figure, but a very large proportion undoubtedly.

3046. Would you not also agree that in too many cases even operation fails to cure, and that a certain proportion of these cases end in death?—Yes, in chronic invalidism or death.

3047. And that, therefore, again, gonorrhœa is a disease of the most tremendous importance, at any rate to women?—Yes, of the greatest importance.

3048. Then, going back to the beginning of the table of gonorrhœa in women, the little glands about the orifice of the urethra are infected in adult women, and secondly the vagina?—Yes.

3049. If one could get a case immediately after infection, then the chance of cure in your opinion would be fair?—I think there is every chance of effecting a cure before the disease has spread to inaccessible parts.

3050. And is it not also the case that the great trouble in treating gonorrhœa—I am thinking especially of women—is that the organism gets into the cells and becomes intra-cellular, and that the remedies we wish to apply cannot get at it?—Yes, that is so; the ordinary remedies will not penetrate the cells.

3051. It is not only the Fallopian tubes, but even when it is confined to the more or less external parts it is still inaccessible?—Yes.

3052. Then, not only from the point of view of what it does, but the point of view of the great difficulty of treating it, you hold that gonorrhœa is very serious?—Yes, I do.

3053. And further, that most unfortunately there are frequent recurrences after a woman thinks she is cured?—Yes, a great number. It is very difficult to say when a woman is cured, or whether she is ever cured.

3054. The organisms are there in the cells, and imprudence, such as indulgence in alcohol or sexual intercourse, by flooding the parts with more blood, tends to bring this to the surface, and there is a fresh attack, although there is no fresh infection from without?—That is so.

3055. Therefore, again, you would like to emphasise that gonorrhœa is a matter of very great importance?—Yes, I would lay great stress on that.

3056. With regard to children, nearly all the cases of ophthalmia neo-natorum, and a great many cases of ophthalmia in children would be due to gonorrhœa?—Nearly all of them are due to gonorrhœa.

3057. And a great many cases of blindness, both of infants and young children, are due to gonorrhœa and its consequences?—Yes, it is the principal cause of blindness in young children.

3058. Then I see from your notes that children of four years of age and even younger than that, are frequently ruined and suffer from vulvar vaginitis?—Yes; there are two cases at present in the hospital, two quite recent infections of that sort.

3059. And you find the greatest possible difficulty in getting these poor little children well of it?—Yes, it is very difficult to cure.

3060. May one take it for granted that you are very strong upon these remedies you yourself have suggested. I mean the recommendations. Might I read what I understood you to say; first, that you advocated improved and free hospital treatment?—Yes, I lay stress on that.

3061. Treatment something like that of tuberculin dispensaries?—Yes, I think that would be of advantage.

3062. You lay stress on the education of the public, whether by private practice or otherwise?—Yes, I do.

3063. You also told us just now about the necessity of improved instruction and improved examination of medical students of both sexes?—Yes.

3064. You also told us about the education of the patients themselves: that they should learn in what a dangerous condition they are, and how liable they are to spread the trouble?—Yes, it is most important.

3065. Then what about the education of local boards of health and borough councils, and other authorities?—I think that is of equal importance.

3066. Are they not at the present time a little unconscious of their duties?—I should fancy so.

3067. And hospital authorities too. If they understood what this means to the nation, would they not perhaps take more trouble?—I think they would, as is evidenced by the London Hospital, which has been considering the subject very closely.

3068. You have said in your last paragraph that the public authorities do not consider the importance of research in these subjects, as is evidenced by the attitude of King Edward's Fund towards the Lock Hospital?—I alluded then to when we were rebuilding the Lock Hospital, and we applied for a pathological laboratory. The response that was given was this: "The plans provide for a pathological laboratory in the basement. This appears to the Committee to be a questionable necessity in a small hospital. They are of opinion that the basement might with advantage be re-arranged, so that some of the numerous cellars might either be let off and so prove a source of income, or be used for therapeutical purposes." So that we have practically no laboratory at this hospital, where we have more material than there is at any other hospital in the country.

3069. Penny wise and pound foolish?—Yes.

3070. (*Dr. Mott.*) I gather that your opinion is that a case of venereal disease requires a skilled practitioner to diagnose it?—In many instances in early conditions of syphilis, certainly.

3071. But it is of very great importance to diagnose the primary sore?—Yes, it is.

3072. And to apply treatment at once?—Yes, at once.

3073. It is quite impossible for an unqualified person to diagnose many cases of syphilis from the appearance?—It is quite impossible for an unqualified, and very often impossible for a qualified one.

3074. That is inexperience?—Certainly, inexperience.

3075. And you would think it was quite impossible for an unqualified person to use the most efficient treatment?—Certainly.

3076. Therefore, in the interests of the individual and for the public safety, it is not advisable for anybody but an experienced and qualified practitioner to treat these cases of syphilis?—Yes, it is very difficult to find a sufficient number of experts throughout the country.

3077. But if some organisation were to take place by which patients could be treated either at hospitals or institutions specially provided for the treatment of

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venereal diseases, that would be a very important element, would it not, in preventing the spread of this disease?—It would be a great advance, undoubtedly.

3078. Then with regard to gonorrhœa, is it possible for an unqualified man to decide in every case whether a man has been cured of his infectivity?—It is a very difficult matter to decide upon even for an expert.

3079. But an expert would be able to decide whether a chronic case was infective or not by the microscope?—Yes.

3080. And you think it is very important, do you not?—Most important.

3081. Then with regard to the Wasserman reaction, you mentioned that that is a test of whether a man should marry or not?—I think it would be advisable for any man before marrying to have a Wassermann test, if he has had any disease in the past.

3082. Supposing he gave a positive reaction, would you say then that he should not marry?—I should advise him not to marry until his Wasserman is rendered negative.

3083. Yet sometimes we know a negative Wassermann reaction may become positive by the injection of salvarsan?—Yes, that is so.

3084. You have what is called a *reaction provocativa*?—Yes.

3085. So that it is a little difficult?—It is a difficult matter.

3086. So that, perhaps, after all you will come back to the length of time of infection, and as to whether a man showed any signs on his body?—Yes, I should.

3087. Together with a Wassermann reaction?—Yes.

3088. Sir David Brynmor Jones asked a question whether, if a man has any spirochaetes in him, might he necessarily transmit the disease to his offspring?—The probability is that he would.

3089. Then what do you regard as proof of a man having been cured of syphilis?—The negative Wassermann reaction and, of course, to make certain, what is called a provocative injection of salvarsan. If he has a negative Wassermann reaction, and remains negative after a small injection of salvarsan, then I should say he was perfectly fit to marry.

3090. Many people—Neisser, among others—say the only proof is the possibility of re-infection, and experimentally that seems to be the case. I mean to say, there must be a great many people who have the organism, at least not capable of re-infection, with perfectly healthy children?—There is no doubt about that.

3091. There are thousands. I mean to say we must be careful not to over-state the case with regard to the Wassermann reaction?—Yes.

3092. A number of observations have been recently made by Plant, of London, on children born of parents suffering from general paralysis, and only in one of a large number were there any signs on the body at all of the children suffering from syphilis, yet they gave a positive Wassermann reaction. I think that is of very great value in connection with Mrs. Creighton's question, because I think many of them in future may well become the subjects of serious disease. Would you, therefore, recommend the testing of the blood of children born of parents suspected of syphilis with a view to giving them treatment if they gave a positive Wassermann reaction?—Yes, I think so.

3093. (Canon Horsley.) The question of the expense has been partially examined on already; but I want to know what sort of cost it is going to be to the country, and so on. We had a figure given us by the Royal Navy the other day. There were 13,461 blue-jackets under treatment in the year. That at 5s. 8d., which you gave us as the cost per injection, with 3·3 injections on average for each, works out at about 12,000*l*. That is the cost of that drug just for the navy alone?—I have not worked out the figure.

3094. I have worked it out, and, taking those figures, it comes to just about 12,000*l*. Of course, that is a very serious matter when you take the general population, the army, and everything else as well. Then it occurred to me whether salvarsan was

any more worth 10s. a bottle than Beecham's pills are worth a guinea a box. Is not somebody making a large profit on its production?—No, I do not think so.

3095. But it did sound rather as if it were a high price?—I believe it costs an enormous sum to produce.

3096. I am acquainted with other cures, for alcohol, for example, which by no means cost in proportion what you pay for them?—There is no cure for alcohol, but this is a cure.

3097. Nor for syphilis either, apparently?—I do not say that.

3098. Then with regard to the diminution of quackery, do you consider there has been a considerable diminution in quackery?—It is very difficult for me to say.

3099. I state this as a fact. I began my career as a curate in a little village in Oxfordshire, and I spent a large part of my time scratching bills off gateposts, &c., and I am spending the end of my career also in a little village, and I never see any at all?—I do not think there is so much advertisement.

(Canon Horsley.) That is a very striking fact.

(Chairman.) There is a much larger reading of newspapers now.

3100. (Canon Horsley.) Then there is another form of quackery comes out. Supposing I am a young medical man and I have put out my brass plate this morning, and I have never had any instruction on syphilis and have never had the privilege of being examined by Sir Malcolm Morris, and know nothing about it, and a man comes to me who is suffering from syphilis and I attend him, would not you call me a quack?—You are a qualified man.

3101. I am not qualified for that. Should not it be more a matter for specialists?—It would be better for the general public.

3102. People in the medical profession should not, by etiquette or custom, be allowed to treat certain diseases unless they know something about them?—It would be a very good thing. At the same time, this young man has his qualifications for practising, and he cannot possibly know much about all the diseases.

3103. No, but as a matter of course, should not he say: "I do not know much about this. You had better go to Mr. Lane"?—It would be very wise of him but I am afraid he would lose his patient.

3104. It is rather an alarming thing to know with regard to such a very prevalent disease, which is of all-importance to the community, that young men are let loose to treat it without any instruction. I think they join the ignoble army of quacks if they do so. A new point to me has been raised, that is, the patients treated for both these diseases simultaneously are half those treated for the diseases separately in the London Ward. I did not know so many people had both?—It is quite common in women.

3105. And with regard to the cases in the Cambridge Ward, they are three times as numerous: 18 had gonorrhœa, 18 had syphilis, and there were 56 with both diseases?—Yes; that is so.

3106. Is it a common thing that so many people have both?—It is very common to find it.

3107. (Mr. Philip Snowden.) At the same time?—Yes; to have the two diseases at the same time.

3108. (Canon Horsley.) But in the case of the Cambridge Ward they are three times as numerous as those with one or the other?—Yes. I cannot quite explain that.

3109. With regard to the distribution of printed forms that you advocate here, at the first meeting of the Commission I brought one of them which was given out at Guy's Hospital?—That was copied from mine.

3110. That, I was informed, was at one time given out pretty freely to out-patients?—It was.

3111. But latterly it has not been given out?—No.

3112. You say it would be a very good thing?—Yes, I think it is excellent.

3113. Until the blessed word "shall" comes in, the word "may" effects very little?—Not much.

3114. And as at the present moment Guy's is the only hospital, it is in the "may" stage and not in the

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"shall" stage?—I think in most places it is in the "may" stage.

3115. At most places it does not exist?—I would not like to say that. At a large number of hospitals it is certainly given.

3116. I want to press the point that it ought to be compulsory, because, especially at large hospitals, young men are always changing, and one does not do what another has done beforehand, and so forth. I think it is extremely important. In municipal matters we have found great advantage in putting out bills of instructions of that kind with regard to summer diarrhoea and things of that sort. We placard and distribute. Do not you think that should be so with regard to syphilis?—I think you cannot give the patient too much information.

3117. For example, recently in many boroughs of London and elsewhere we have had a large bill put out as to the effects of alcohol. Probably you have seen it?—Yes.

3118. Could not we have something similar done with regard to the effects of syphilis, by municipal action, such as has been done with regard to alcohol?—If you could get the municipal authorities to consent to it.

3119. If they would not consent to it, would not it be largely because of the idea that you must not mention the disease?—Yes, I think so.

3120. I think there is probably more reason for that. In this little paper you have a most amazing statement; "A distinguished American surgeon has said not a single prostitute has ever been reformed, but in every alleged case the woman has returned to prostitution within a year after her reclamation." Is not that American surgeon chiefly distinguished for ignorance?—No; he was a man who had considerable experience in venereal diseases.

3121. I am thankful to say I can contradict that.—So can I.

(*Canon Horsley.*) With regard to the rescue homes or anywhere where I do work, that is an abominable lie.

(*Sir Almeric FitzRoy.*) The statement has nothing to do with this country.

(*Sir David Brynmor Jones.*) I do not think it is a fair inference from the answer of the witness, I am bound to say.

(*Canon Horsley.*) It is not the experience of anybody who has ever worked with them.

(*Sir David Brynmor Jones.*) That may be so; but I do not think the Canon is justified in inferring that from the answer of the witness.

(*Canon Horsley.*) You do not believe that, at any rate?

(*Witness.*) I go on to say that I have seen a large number.

3122. You do not believe it, nor does anybody else?—No.

(*Sir David Brynmor Jones.*) The statement is not that reform is impossible or never takes place; but it is that in his experience it never takes place.

3123. (*Canon Horsley.*) That reference is very exceptional and very small, I should think. However, you do not believe that for a moment?—No.

3124. And the Lock Hospital is rather differentiated from the other hospitals by paying attention to the prevention as well as to the cure?—Yes, it has a rescue home.

3125. And work is done in the wards by lady visitors and so on?—Yes.

3126. That rather differentiates it from other hospitals?—Certainly.

3127. Other hospitals, perhaps from necessity, are mainly confined to cure?—Yes.

3128. Here they pay special attention to prevention?—Yes, and to reform.

3129. Which is of the most advantage to the nation in the long run, cure or prevention?—Prevention, I imagine. I am told it is better than cure.

3130. (*Rev. J. Scott Lidgett.*) I notice your figures of the out-patients treated in the Lock Hospital show an immense preponderance of males over females?—

Yes, that is so. There are many more days for the treatment of male patients than of female patients.

3131. The preponderance is growing, I think?—Yes, I think it is. The number of women is certainly falling.

3132. Do you think that represents the relative incidence of these diseases in the male and female population?—No, I do not think so.

3133. Then, to what cause is it to be attributed?—There is a certain amount of fashion in attending hospitals. Sometimes they go to the hospital for stone. A lot of prostitutes are treated there, and diseased women who are not prostitutes. They also go to the French hospital. But very likely, for some reason or other, they may flock back to this hospital later. Of course there is the objection that has been offered to this hospital, that is its name; but it certainly does not prevent the men from coming there, and a certain proportion of women.

3134. I understand you make a strong point of improved medical education in regard to these diseases?—Yes, I do.

3135. So far as it is practicable, would such improvement be sufficient to qualify any medical practitioner to administer the salvarsan treatment?—The salvarsan treatment ought not to be administered by anybody until he has had some practical experience and seen a good deal of it done, because there are dangers that are due to ignorance of the technique.

3136. But would your ideal point to the ultimate instruction of medical students until they are all capable of doing it?—I think it would be a very good thing for the health of the community at large.

3137. Do you think it is practicable?—I do not think it is practicable for all the students. There are some whom you could never instruct.

3138. I presume it would be a comparatively simple thing to demand that all medical officers in infirmaries and such institutions should be qualified to give it?—Yes.

3139. Then it would be a very simple thing, would it not, for the Local Government Board to impose the duty on Boards of Guardians to supply the treatment in all their infirmaries, as is done at Fulham?—Yes, it would be.

3140. On another question, I notice in your paper you say, on page 14: "Our youth for the most part leave their homes without any instruction in the laws of reproduction and of sexual physiology in general, and having no means of acquiring knowledge from legitimate sources, have recourse to others; they know nothing of the possibly serious consequences which may result from a moral lapse, and in their ignorance they are liable to succumb on the first occasion that temptation presents itself." Does that suggest that instruction should be given to all young people?—That is my view very strongly.

3141. By whom do you think it should be given?—There are various ways. It might be given by parents or it might be given, by some specially qualified lecturers, to the boys just before leaving school. I certainly think the knowledge ought to be imparted to members of colleges at Oxford, say, who ought to know the risks they run, and to medical students at hospitals, and to any institution like the Polytechnic. The young men ought to have some elementary idea of the subject.

3142. Would you impose any duty in respect of it upon the education authorities?—I should not like to do that.

3143. You do not think it could be made a duty?—That is hardly a question I can answer.

3144. I think you suggested that lectures or instructions should be given in schools?—Yes.

3145. You would not in any way suggest, taking the case of London for instance, that the London County Council should be charged with the duty of giving instruction before scholars leave school?—I should say in schools the headmaster ought to be responsible if instruction is to be given.

3146. At what age would you give such instruction?—I should give instruction at the age of 16 or 17.

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[Continued.]

3147. So that you would not give it at the ages during which children are present ordinarily in elementary schools?—No, I think not; it is impossible.

3148. What would be the nature of the instruction you suggest should be given, in some way or other, to boys and girls of 16 or 17?—There must, in the first place, be some elementary idea of physiology, and sexual physiology; and, in the second place, they must learn that there are certain diseases to which they may be liable from immorality.

3149. Can you suggest any helps for parents or others who have to furnish such information?—I should leave it to the parent, I think, provided the parent has the knowledge.

3150. But, surely, the ordinary parent is disinclined, and perhaps, not best fitted to give all the instruction you suggest?—I am afraid that is so.

3151. Have you any suggestion to make as to the means by which this difficulty could be overcome?—I have no doubt there are a number of people who are interested in social reform who would be very glad to deliver instruction on this point.

3152. Would you suggest it should be given direct to young people, or chiefly to their parents?—I do not see that there is any difference much between it.

3153. Surely it is somewhat important, whether you make the parent the intermediary or you supply the defect of the parent by other means?—If you instruct the parent, it certainly would be for his benefit if he could impart the instruction.

3154. (*Sir John Collie.*) I suppose the proper time to teach these subjects would be at the evening schools where young people are taught by lectures on health and so on?—Yes, that would be an excellent time.

3155. With regard to the young doctor, I take it that a knowledge of venereal disease is part of the general education in surgery?—Yes, certainly.

3156. So that every student is liable to be examined upon that subject?—Yes, he is.

3157. And when he comes up for his examination, he knows there is the possibility that he may fail if he does not fully understand venereal disease?—Yes. He knows if he comes to me he is pretty certain to be examined on it.

3158. Quite; and similarly I take it, if he is being examined by other examiners, there is the chance of his being examined in these subjects?—Yes.

3159. So that it is a safe conclusion that every student more or less studies the subject?—He has to know something about it.

3160. So that it would be unfair to say that a young medical man is in the position of an unqualified quack?—Certainly.

3161. We heard that at Guy's Hospital the treatment of primary and secondary syphilis was absolutely forbidden?—Yes, I was told that yesterday.

3162. I take it that the King Edward's Fund could control that quite easily in deciding on the grant?—I do not think Guy's Hospital has any grant.

3163. I was not referring to Guy's, but generally. They could control that question, could they not?—Yes.

3164. With regard to the treatment of venereal disease, I take it it would be impossible, not taking London alone but taking the country generally, to suggest for a moment that any adequate treatment of venereal disease could be carried out if it were always to be relegated to specialists?—Yes, the existence of specialists would be impossible; they could not live.

3165. So that the general practitioner must not only know, but must be capable of treating ordinary venereal diseases?—Yes, he must. Of course, in rural districts he does not get any, or very little.

3166. He gets less. Would the establishment of public laboratories where the panel and other general practitioners could send specimens of what they thought was infective material taken from suspicious cases, ensure an early and appropriate treatment of cases which would, if unrecognised and therefore untreated, be a cause of the spread of syphilis, gonorrhœa and soft chancre?—I think the establishment of institutions such as that would be of enormous value.

3167. I gather from what you have told us, that through the discovery of this specific organism which is the cause of syphilis, the period during which the infectivity is contagious may be diminished to a very considerable extent?—To an enormous extent by the use of salvarsan.

3168. In view of the certainty of thus reducing the risks of what may be called innocent infection of children and other unoffending persons, what steps do you think might be taken by the State and the community to obtain earlier treatment and diagnosis?—The only steps that could be taken are the establishment of institutions such as you mention, or a dispensary or some institution of that sort.

3169. With regard to Poor Law treatment, is that really adequate or efficient for the treatment of venereal disease?—You mean treatment in workhouse infirmaries?

3170. Yes?—I should say that as a rule it was inadequate, but at certain infirmaries they get men specially interested in the subject who treat the cases very thoroughly.

3171. But those are more or less exceptions?—Yes, they are.

3172. Do you think the public generally appreciates at all the extent to which innocent non-venereal, if I may so term it, syphilis and gonorrhœa is rampant?—I think the general public are quite ignorant of even such a possible contingency.

3173. The 76 children you mention as having been treated in the children's ward of the Lock Hospital since November 1910, are, of course, all innocent infections?—Yes.

3174. Were they all preventible?—There are the cases of congenital syphilis, and the cases of accidentally acquired syphilis, and there are cases conveyed in the way that I mentioned.

3175. In the broad sense, they are all preventable, I take it?—Yes.

3176. If they had been untreated, would they in the near future have added very considerably to the general deterioration of the health of the community?—I think undoubtedly if they were untreated.

3177. With regard to the 29 girls between the ages of 4 and 14, which, of course, are all innocent infections as far as they are concerned, I take it most of them are the result of criminal assaults, and probably most of those criminal assaults have never been brought home to the offenders?—None, I should think.

3178. You have been asked if you have any idea of the incidence of primary infection of the disease in medical men. Would you be inclined to dispute the statement made by the late Sir Jonathan Hutchinson that he personally attended for many years an average of ten surgeons a year for primary syphilis acquired through operations?—I should not be at all surprised at that number.

3179. As a matter of fact he said he had done that for many years?—Yes, I should say it is quite possible in the case of a man with his practice.

3180. I take it the aggregate of midwives and nurses infected in the same way must be very much larger?—Yes. I cannot speak with certainty on that, but it is probable.

3181. Is there any disease you know which is more contagious in its early stages than syphilis, gonorrhœa and soft chancre?—No, I do not know of any.

3182. Do you agree with the experience of continental authorities that voluntary submission to treatment where facilities are sufficient and adequate is more likely to diminish the disease than compulsory notification or detention?—I certainly think so. Compulsory detention has been proved to be utterly inefficient.

3183. With regard to the statistical evidence we have had brought before us, would it be correct to say that, owing to the method of certification of deaths from venereal disease, and what I might almost call the necessity for concealment from the relatives, the number of deaths certified as due to syphilis gives us no idea of the prevalence of venereal disease in the community?—Absolutely no idea.

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[Continued.]

3184. With regard to hereditary syphilis, is it always recognisable?—It may be a long time before it is recognisable. As I have said, the symptoms may be delayed for many years, up to 20 or 30.

3185. Would you give the Commission some idea of the effects of hereditary syphilis, especially when it is unrecognised and untreated, with regard to the children and so on?—There are many manifestations; one of the commonest starts with the nose. There will very likely be the loss of some of the bones of the nose and a very familiar depression of the nose that one sees every day in the street. Then, of course, hereditary syphilis is very likely to attack the eyes and give rise to blindness; it also attacks the ears and gives rise to deafness, and attacks the bones and gives rise to deformities. It also attacks the skin. There are many manifestations of skin diseases in children. It will affect the teeth and it may affect the internal organs such as the liver, the spleen and the lungs. The spirochæte is found, I believe, in enormous numbers in the spleen in hereditary syphilis. Those are a few of the ways that strike me at the present moment.

3186. What about mental and moral degeneration? Do you think it has a large influence on that?—I imagine so, but I am not in a position to speak on that point with authority.

3187. I suppose a large number of these stunted children one sees very often are cases of inherited syphilis?—I think so.

3188. You have given us the remote consequences of gonorrhœa. Is it safe for a man or woman who has ever suffered from venereal disease in any form to marry without a thorough medical examination by a competent medical man?—I would not like to speak as to the safety, but as to the advisability I should certainly say so.

3189. You think there is no question about the advisability of it?—I think so, certainly.

3190. (*Mrs. Burgwin.*) Amongst the many ways by which infection could be carried, do you think it could be carried in the laundry of infected persons?—Yes, certainly. I could give instances of that.

3191. Then I should be right in saying that I have seen women infected entirely through the washing of garments?—Yes, that is so.

3192. I wonder if there are any means of sterilising those garments before they are handled?—They can only be sterilized by heat. The spirochæte can be destroyed by heat.

3193. (*Rev. J. Scott Lidgett.*) I thought it did not live in the air. Can it live on the garment?—Yes, it does for a certain time. I have an illustration of a case in which a woman was infected with a chancre on the nose, presumably from rubbing her nose with one of the garments or a towel. She was a washerwoman.

3194. (*Sir Almeric FitzRoy.*) At what temperature is it destroyed?—I should not like to say. I do not know enough about it.

3195. (*Sir David Brynmor Jones.*) I thought you told me that the spirochæte could not live in air alone?—My expression was it could not be air-borne, but if clothes were infected with the discharge from a syphilitic sore, and they were to come into contact with an abrasion on the skin of another person, a syphilitic infection would almost certainly result.

3196. (*Mrs. Burgwin.*) May I press further what Dr. Scott Lidgett asked you about. You would not think of giving a lecture on reproduction to children under 14 years of age?—No, certainly not.

3197. The L.C.C. lectures are given to children under 14 years of age?—I do not think they should be instructed until the age of 16 or 17.

3198. You spoke about the ways of recognising this disease. You spoke of the eyes, ears, and nose but you did not speak of the brain. Perhaps you know that I deal with thousands of mentally deficient children?—Yes.

3199. Do you think that syphilis has any connection with the mentally deficient?—I think it has a deteriorating effect on the intellect. I did not mention nearly all the manifestations of hereditary syphilis; I suppose there are hundreds of them. I only mentioned a few of the prominent ones.

3200. I am so particularly interested in those mentally deficient children, and that has a direct bearing, I think, on the examination of the children in many cases?—Yes.

3201. (*Dr. Newsholme.*) Different methods of infection were mentioned. Very often cases allege that they have acquired the infection from some public convenience. Have you come across any case where you have satisfied yourself that that was the case?—Never. It is usually an excuse.

3202. (*Mrs. Creighton.*) Is that true of men and women alike?—I should say so.

3203. Because it is one of the common things one hears spoken of. I would like to have that quite clear. You do not recognise that as a source of infection?—No, I do not.

3204. (*Dr. Newsholme.*) Would you say that equally of gonorrhœa as of syphilis?—I should say so. I should look with great suspicion upon a history of that sort.

3205. With regard to the salvarsan treatment, have you come across any cases of death as a result of the treatment?—I have come across cases in which syphilis plus salvarsan has caused death, but I cannot say that I have ever had a case in which salvarsan *per se* has caused death. It has been administered in very severe cases, and there were two fatal cases in the Lock Hospital.

3206. Judging by your large experience, would you say that any small risk which may be produced by the treatment by salvarsan is preferable to letting the disease be treated by less efficient means?—Yes, the risk is entirely outweighed by the advantages.

3207. I gather from you that the great gain in the salvarsan treatment is that the infection ceases to be open?—Yes, the period of contagious symptoms.

3208. With regard to the question of infection and the danger of infection in syphilis and gonorrhœa, a contrast was drawn between infection of these diseases and of typhoid fever, for example, the theory being that in typhoid fever you would take wide general precautions?—Yes.

3209. I suppose that is not the only advantage of notification of typhoid fever. It enables you to go to the house and secure better treatment for the patient, at the hospital or elsewhere?—Yes.

3210. Typhoid fever is largely spread by person to person as well as by water supplies?—Yes.

3211. Therefore there is a personal aspect of notification as well as a general aspect?—Quite so.

3212. And if syphilis were made notifiable, that personal aspect would be predominant?—Yes.

3213. And if the notification of cases of syphilis could be shown to lead to earlier and better treatment and more continual treatment, then notification would be a very important means?—Yes, if that could be shown.

(*Sir Malcolm Morris.*) Is it true that typhoid fever is conveyed from person to person in a large proportion of cases?

(*Dr. Newsholme.*) No, I did not say that.

(*Sir Malcolm Morris.*) I understood you to say so.

(*Dr. Newsholme.*) If I did, I mis-stated it. What I intended to say was that quite commonly, in small houses particularly, typhoid fever is spread to the mother who nurses the patient, or the other persons in the house, and there are multiple cases in the house.

3214. With regard to the question of the duties of the sanitary authorities in respect of venereal diseases, can you tell me if there are any duties laid on the sanitary authorities in this matter?—I am not aware of any.

3215. Nor am I. There are certain powers which sanitary authorities have which they might possibly apply in cases of venereal disease, but at the present time, so far as I know, there are no duties in that respect?—No duties at all.

3216. Then I was surprised to hear that the King Edward Hospital Fund had sent that letter which you quoted. That Fund has upon its committee a number of distinguished hospital physicians?—Yes. I believe it was one of them who made up that resolution.

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[Continued.]

3217. If such distinguished hospital physicians should deprecate pathological diagnosis and treatment of venereal diseases, can it be wondered at that the sanitary authorities have not yet realised the possibilities of their position?—No.

3218. Sir John Collie has already brought out a point that the youngest doctor recently coming from a medical school is in a very different position, however imperfect his knowledge is, to that of a pharmaceutical chemist or herbalist who proposes to treat a case of venereal disease?—Yes.

3219. You would wish to emphasise that point also, would you not?—Yes. He cannot fail to have had some experience with the disease, and to have had some instruction with regard to it. But especially when I wrote that paper, I considered the instruction inadequate.

3220. We should all agree to that; but all things are relative, and he is in a much better position for treating the disease than a person who has had no medical training whatever?—Yes, certainly.

3221. I think you have not been asked as to the relative utility of Lock hospitals and general hospitals in the treatment of venereal diseases. I think you consider there is a sphere for both of these?—Yes, I think so.

3222. And you have not found that the name "Lock Hospital" in your actual experience has to a very large extent prevented people coming to you?—I believe it has in the case of the Female Lock

Hospital, in fact the name is changed now. It is not known as the Lock Hospital; it is the Westbourne Hospital for Women and Children.

3223. Still, notwithstanding this common name, a large number have continued to come to you?—Yes, a large number.

3224. Do you think it has acted more deterrently in recent years than in former years?—I cannot say. The numbers certainly show a decrease, but whether it is from that prejudice I cannot say.

3225. Putting all the facts together, would you incline to the view that the decrease in numbers treated at the Lock Hospital and the fact that there are very many fewer prostitutes coming to the hospital than formerly, point to the conclusion that there is less venereal disease than formerly?—I do not think so. I think prostitutes used to come to the hospital, but now they are treated elsewhere. When I was at the Female Hospital 20 years ago there was a large proportion of prostitutes there; but now, as you see, there are very few professional prostitutes; they are mostly young girls who have recently been seduced.

3226. What evidence have you that they are treated elsewhere?—The only evidence is that they do not come to us.

3227. That is equally consistent with the supposition that there are fewer of them?—Yes, that is possibly the case.

(Chairman.) Thank you.

The witness withdrew.

TENTH DAY.

Friday, 19th December 1913.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mr. PHILIP SNOWDEN, M.P.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Dr. THOMAS HENRY CRAIG STEVENSON re-called and further examined.

3228. (Chairman.) Since you gave evidence before me on the last occasion, you have made a considerable number of fresh investigations of a statistical character, which have led you to form conclusions which seem to be of considerable importance?—Yes.

3229. I see you say in your paper that while the death registers, for which you are responsible, are really not trustworthy as regards the absolute amount of mortality, they do throw light in varying degrees upon its relative amount. It is that point on which you lay stress, is it not?—That is so.

3230. The relative amount of mortality, and especially its distribution amongst various classes?—Both the social classes and the classes of area in regard to urbanisation.

3231. Then you again lay stress on the amount of suppression of actual facts of disease to which medical practitioners are obliged to resort?—Yes.

3232. And you feel, as we all do, that to a great extent vitiates the value of your work on statistics?—Yes, certainly, as an absolute index to the exact amount of mortality from venereal disease.

3233. Then you give us specimens of letters you have received from medical practitioners?—Yes.

3234. Who express in different language the difficulties with which they meet?—Yes.

3235. May those letters be taken as typical of the attitude of mind of a very large number of medical practitioners in regard to those diseases?—I think they may be taken certainly as typical replies we received to our inquiries with regard to deaths that proved on investigation to have been really due to a venereal disease, although not stated so to be on the original certificate.

3236. I suppose these are only specimens of a very large number of letters of the same class which you constantly receive in the course of your inquiries?—We have only been preserving these letters for the past two or three years, but I have a considerable number more with me to-day. The number is not a very large one, but I would put it that all the replies we receive point in the same direction.

3237. These letters you have set out here may therefore be taken as representative?—Certainly.

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[Continued.]

3238. And the two causes which operate to vitiate the returns are, first of all, the delicacy of the medical practitioner in his relation to the family; and, secondly—this is a point I will deal with later—the question of insurance in some cases?—I believe those are the two main points.

3239. You have instituted a comparison between institutional death and deaths in the home, and you have given us some tables, which will be very useful. First of all, in the table at the bottom of your first page you give two years. Are they the sum of the deaths in two years? Have you summed the two years to get that number of deaths?—Yes, that is so.

3240. Because you say "Report of all deaths in 1912." Then you give us a table which enumerates 1911 and 1912. Is that the sum of the deaths for those two years?—That would be the sum of the deaths for those two years. They are the only two years for which we have the information in that form. And to put the matter on a more stable basis, the two were treated together.

3241. Then you arrive at the conclusion, as far as 1912 is concerned, that 21.6 per cent. of all deaths occurred in institutions, of which 24.3 were males and 18.7 females?—Yes, that is so. That applies to 1912 alone, and to deaths from all causes.

3242. And applies, I suppose, to all ages?—Yes, it applies to all ages.

3243. Then you discriminate from and eliminate the children under 15 years of age, and get 14.9 per cent. of deaths in both sexes?—Yes.

3244. And the proportions become 28.6 for males and 20.1 per cent. for females over 15 years of age?—Yes, from syphilis.

3245. This shows that the deaths in institutions are much less than deaths in the home?—Quite so.

3246. With the exception of these last figures of those over 15, I think. When you come to over 15 in your first table, the larger number of deaths occurs in institutions?—Yes.

3247. Whereas, in regard to deaths under 15, it is the other way?—Yes.

3248. And the total is the other way?—Yes.

3249. So that we can infer, in regard to persons over 15 years, that there is a larger number of recorded deaths in institutions than outside of them?—Yes.

3250. Your next table gives the percentage proportions, which are quite important. There are 41 per cent. of males of all ages who die in institutions, and 59 per cent. not in institutions; the corresponding figures for females are 39 and 61?—Yes.

3251. Then for those under 15, 33 per cent. of males are institutional, and 67 non-institutional deaths; the corresponding figures for females being 33 and 67?—Yes.

3252. Of those over 15, 59 per cent. of males are institutional, and 41 per cent. non-institutional; the figures for females being 52 and 48 per cent. respectively?—Yes.

3253. What do you argue from that?—What seemed to me to be the most reasonable conclusion was that, in the case of syphilis, and especially in the case of adult syphilis, the institutional percentage was artificially raised by reluctance on the part of medical practitioners to certify that disease as the cause of death when the death did not occur in an institution. I presume that the medical officer of an institution feels that he has a much freer hand in regard to certifying the real cause of death in such cases than a private practitioner, who may damage his practice by taking such a course.

3254. You mean generally that concealment of cause arises in regard to deaths which do not occur in institutions?—I think at all events it is much more marked probably, and carried much further. I can hardly conceive that institutions are resorted to in the case of patients suffering from these diseases to such an extent above that in which they are resorted to by patients in general, as would correspond with these percentage proportions.

3255. Then you come to the conclusion that gonorrhœa as a cause of death is frequently concealed. Will you explain your views on that point?—In view

of what gynæcologists tell us as to the seriousness of gonorrhœa, especially in females, and the number of deaths that are really to be attributed to it as the starting point of various local inflammations, I think there can be no doubt that we only get a record of a small proportion of the total cases which might be recorded as due to gonorrhœa.

3256. In fact, you come to the conclusion that the death-rate affords no indication of the large female mortality from gonorrhœa?—I do not know that the mortality is absolutely a very large one, because I have taken out the total number of deaths from the pelvic conditions that are attributed in many instances to gonorrhœa. The total in a year is 735, so that, looking at it from that point of view, it would seem that the number of deaths from gonorrhœa must be something less than 735.

3257. Is that the only form which the disease takes that does not get itself registered as gonorrhœa?—I would not say that. I think that would probably be looked upon as the most prominent form, the most likely source from which to look for concealed cases of gonorrhœa.

3258. Is there any prospect of some better tabulation being introduced in future, which would give an index of this large number of deaths which you refer to?—I think it is not a question of tabulation so much as one of certification. I am afraid until means can be devised for obtaining a candid certification of this class of case, that we shall have no material that, however tabulated, would afford reliable returns.

3251. You have discussed at some length the instructions given by the Registrar-General to medical practitioners. You say, I understand, that those instructions give clear guidance on this point. The primary cause of death is defined as the disease which initiated the train of events leading to death, and not a mere secondary, contributory, or immediate cause. Then you go on to say, "Elsewhere the certifier is informed that except in the case of acute specific diseases of recent occurrence, no disease not present at the time of death should be returned as the primary cause"?—Yes, that is so.

3260. How do those instructions work in the case of gonorrhœa?—In that particular instance, I think I point out that as the infection is present at the time of death, the instruction as to not returning a disease which is not present is inoperative; therefore it cannot explain the lack of returns under that head.

3261. Then whenever gonococcal infection is present, ought death, in your view, to be certified as arising from gonorrhœa?—I think so, if we had the information that the death was due to any pelvic inflammatory condition, and that the origin of that condition was gonorrhœal infection which was still in existence, we should tabulate that death as due to gonorrhœa, not to the local inflammation.

3262. You would do that?—Yes.

3263. Would the medical practitioners take that view?—They evidently do not, because they do not return us the deaths under that head.

3264. You have told us, I think, that they ought to do so under your instructions?—Yes, under the instructions they ought to do so.

3265. Either they do not understand those instructions, or they do not carry them out to the letter?—I think it is a case in which one can very readily see that practitioners in most instances would prefer not to understand.

3266. For the reasons which you have given us?—Yes.

3267. You say it is very fortunate that general paralysis of the insane and locomotor ataxy have not hitherto been generally regarded or described as forms of syphilis. Do you mean that those names not being associated with syphilis, get properly returned as causes of death, and are, for our purposes, very important indications of the prevalence of the disease?—That is my meaning. I only characterise it as fortunate from that point of view. I do not express any opinion.

3268. Supposing in the future knowledge spread, and it came to be regarded by the general public that

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[Continued.]

both those diseases were generally and directly produced by syphilis, would the same reluctance to return then come in?—I presume, if we adhere to the use of an open certificate of death, the same reluctance would apply to those diseases as to syphilis at the present time.

3269. Therefore the spread of knowledge might have the effect of making the Registrar-General's figures more untrustworthy than they are now?—Undoubtedly. I should not be in the least surprised if that process has already commenced in a small degree.

3270. I want you to give us the reasons which you have stated here, but in your own words, for the case for the limitation to diseases present at the time of death?—In the first place, I think nobody understands by death from a disease, death from a disease which is not present at the time of death. I give as an instance of that the effect upon returns of death from heart disease, if that limitation were not in operation. Heart disease is often due to an infection recovered from perhaps many years before the patient has died, like infection with acute rheumatism. I think it would be quite contrary, not only to what the public understands, but to what the profession understands by a death from acute rheumatism, if one were to tabulate a death from valvular disease of the heart as due to acute rheumatism which had not been present for 20, 30, or perhaps even more years before death. That is one reason against it. Then there is the difficulty of the more involved nature of the causation the further you trace it back. The more immediate the cause the fewer of them. As you proceed in ascending degrees of ancestry as regards causes as in genealogy, naturally the number of progenitors increases, and the difficulty of selection naturally becomes correspondingly greater. Then again, I think I point out that very often there would be general agreement amongst all practitioners who saw a given case as to its immediate causation; but there might be great differences of opinion as to the more remote conditions upon which that immediate condition, say pneumonia, or something of the kind, depended. The views taken have a great tendency to vary in different returns and different schools of medical thought, and also from time to time. We attribute local diseases now to different causes from those to which they were attributed a number of years back. Then another point really related to the previous one, was that the scheme of tabulation in operation is founded upon an anatomical rather than a causative basis, the reason being that the anatomical is one very much simpler to work, and much less liable to be affected by changes in medical thought, which are always occurring. I think perhaps those are the principal reasons. Finally, I might add on the point No. 6, that whatever the Registrar-General said should be regarded as the cause of death, men would return as the cause of death that which they are accustomed to regard as its cause. Naturally, we cannot expect to dictate to the profession; we must follow its usages.

3271. You think custom plays a large part in determining the form the return takes?—Yes, undoubtedly.

3272. Take the case of an epileptic who falls in the fire and is fatally burned; what do you think is the right return in that case?—We class that as due to epilepsy.

3273. You return that as a death from epilepsy, but the fire is the direct cause?—Yes.

3274. In that case the statistics of death by fire suffer a reduction. Is that any inconvenience?—Yes, I think it is. I think the ideal record is tabulation of that death under both headings, and we are trying to make a beginning in that direction; but the work becomes enormously involved, as you can see from the example given at the end of my paper in regard to syphilis.

3275. Coming to Table 1, you have drawn that up to show the distribution in different parts of the country, in different classes of areas, of syphilis itself, and of the consequent diseases?—Yes.

3276. What value do you attach to that table?—It shows certain characteristics of the distribution of each of these forms of disease, and it shows that the same characteristics display themselves in regard to each; so that I think we may take it that the returns from syphilis itself are indicative of the distribution of the disease as well as the returns of the diseases which are dependent upon it.

3277. You mean that the general correspondence of the proportion of these diseases in the various areas into which you cut the country up, is some evidence that syphilis at all events is proportionately properly recorded?—Yes, I think so. I would contrast with the behaviour of the diseases included in this table, that of congenital debility and premature birth, for which a similar table is given, which shows no such similarity of distribution, although undoubtedly there are many deaths from syphilis included in it. The view I take is, that the syphilitic deaths under that head are, so to speak, snowed under by the non-syphilitic deaths. But I think this table indicates not only that the deaths directly returned as due to syphilis are indicative of its distribution, but it also is very strong evidence of the extent to which mortality from locomotor ataxy, general paralysis of the insane, and aneurism is dependent upon syphilis.

3278. The table shows that the urban excess is considerably greater for syphilis than for what are called para-syphilitic diseases?—That is so.

3279. How is that to be accounted for?—I do not profess to be able to offer any certain explanation. But I suggest that it may be due to the fact that the para-syphilitic diseases are very fatal indeed, whether they attack the sound or the unsound in health. But syphilis is a disease which is notoriously much more serious for the man in feeble health than the man in sound health. We may fairly assume the standard of general health under rural conditions to be higher than the standard of health in the congested populations of large cities.

3280. (Canon Horsley.) When you say "men" you mean "and woman," I suppose?—Certainly.

3281. (Chairman.) You mean that the ulterior manifestations of syphilis are less likely to take place where the conditions of life are more healthy?—No, that was not exactly my meaning. My meaning is, that if a man or woman becomes affected by general paralysis of the insane or locomotor ataxy they are going to die whether they are healthy or unhealthy at the time the disease commences, whereas the unhealthy person has a very much worse chance from infection with syphilis itself than a healthy person.

3282. (Dr. Mott.) Do you apply that to locomotor ataxy and tabes?—I should have thought so, but you would be able to correct my ideas on that.

3283. (Chairman.) In Wales, where the mortality is very low, you ascribe that—at a point we come to later on—to the fact that agriculturists and miners form a large proportion of the population and are relatively immune?—That is so.

3284. In Tables No. 2 to No. 7 you deal with the same figures differently disposed?—Yes.

3285. In Table 2 you introduce institutional differences into the geographical divisions?—Yes.

3286. Are there any points about that Table 2 to which you wish to draw our special attention?—As far as I remember, the main point was that as there is a great urban excess of extra institutional deaths in Table 2 the total excess in the towns is not mainly dependent on institutional certification.

3287. The larger number of institutional deaths in the towns would be deaths better certified?—That is so.

3288. And therefore the certification in towns might be superior to that in the country, and it follows from that there may be more veiled deaths in the country than in the towns?—That is so.

3289. Then Table 3 is "Syphilis, 1911-12." What is the special significance of that?—That applies to children under 15 years of age, and is taken as roughly representative of congenital syphilis.

3290. What are the indications of the incidence of congenital syphilis as judged from these figures?—If

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I recollect rightly, I think the differences are greater in the cases of congenital disease than of acquired disease.

3291. Then I suppose you regard these tables also as strong evidence of the reliability of the figures recorded for syphilis as indicating the distribution of mortality from that disease?—Yes, I think so. I think the facts in this series of tables are mutually self-supporting.

3292. They show a strong correspondence between the figures relating to the four diseases with which you deal?—Yes, so it seemed to me.

3293. I see you put in aneurism. Is it fair to assume that a larger proportion of aneurism is due to syphilitic causes?—I see the proportion which is taken, on clinical grounds, as being due to syphilis is variously estimated from 20 to 80 per cent.; but reading the returns in these tables, one would think that the higher estimate was very much nearer the truth than the lower. Aneurism seems to me to vary on exactly the same lines as syphilis, just as locomotor ataxy and general paralysis of the insane.

3294. That, you think, indicates the connection between the two?—It seems so to me.

3295. In Table 8 you deal with congenital debility, and you include in that premature birth?—Yes.

3296. That table gives the mortality per thousand births from a group of causes of infantile deaths included in the causes of death of the Local Government Board and Registrar-General under the title of congenital debility?—Yes.

3297. How far does that follow the other figures?—Practically not at all. The variation is only from a minimum of 31·2 deaths per thousand births in the rural districts of the south to 40·8 as a maximum in the smaller towns of the north. I beg your pardon, I see 44 in the county boroughs of the Midlands is the maximum. There is no great range of variation. There is really, I think, speaking from memory, less variation than in the mortality from all causes. It is certainly a less variation than in infantile mortality from all causes; whereas the characteristic of mortality from syphilis is the enormous preponderance in the large towns over the rural districts.

3298. The distribution of the deaths included in this figure is, you say, quite unlike that due to syphilis?—So it seems to me.

3299. And you infer from that that whatever number of deaths really due to syphilis is included, those are swamped by the very much larger number of deaths from other causes?—Yes.

3300. I suppose this table is based upon a very small number of returns?—No. The facts for Table 8 would be rather numerous. You see, the total mortality in England and Wales is 37·9 deaths per 1,000 births. There are over 900,000 births in the year, so that there is a large number of deaths—900 times 37·9.

3301. I suppose this table does not mean that there is not a large number of these deaths which could be traced to congenital syphilis?—No, I do think it means that. I think it means that you cannot take this mortality as in any way indicative of the proportion of deaths from syphilis.

3302. In Tables 9 and 10 you split the figures up amongst the administrative counties?—Yes.

3303. What lesson does that distribution teach us?—The only lesson I could infer from that was that the figures would not bear so much refinement of analysis. They were not on a large enough basis to bear splitting up into so many different areas. We tested that by measuring the correlation, the degree of correspondence between congenital and acquired syphilis—or the mortality from them—in the different individual counties and county boroughs. We found that there was practically no correspondence, so that it follows that the rates as given here are very unreliable indeed; at least, it seems to me to follow so, because I should think that the reality must show a considerable amount of correspondence between the mortality from the congenital and acquired syphilis. I should think, that where the disease is largely prevalent, both rates should be high, and

where there is little prevalence, both rates would be low.

3304. Your general deduction, then, seems to be that the recorded juvenile mortality is a better test of prevalence than that of acquired disease. It is at the bottom of your page 9?—Yes. We get higher correlations between the rates from congenital syphilis in the boroughs and counties than for acquired syphilis. I would lay very little stress indeed upon these correlation co-efficients. They are all very low, and I do not think they afford any special indication or significance.

3305. In Table 11 you make a distribution of deaths from all these four diseases in accordance with eight classes of occupations?—Yes.

3306. And nearly all through the table it is Class 5 which gives the largest numbers?—That is so, from syphilis at all events.

3307. From syphilis right through, I think?—Yes.

3308. But when we come to locomotor ataxy, in your separate table for that, Class 1 is far ahead of all the others?—It has a mortality of 65, as against 56 for Class 5, which comes second.

3309. It is second in that disease only. In all other cases I think it is Class 5 that suffers most?—Yes, I believe so.

3310. Now, do you deduce from the high incidence from locomotor ataxy in Class 1 that that class—which, I suppose, includes people who do less hand work and most brain work is predisposed to this disease?—Undoubtedly.

3311. That the syphilitic infection in them, influenced by the amount of their brain work, may lead to locomotor ataxy?—I would rather not express an opinion on that.

3312. However, it is very clear that the group of miners and the group of agricultural labourers, and the group of textile workers (Nos. 6, 7, and 8) generally speaking show very little locomotor ataxy?—Remarkably so. It was a great surprise to us to find how free they were in comparison with the other working-class groups.

3313. Agricultural labours in especial are very low?—Yes. Of course, their rural surroundings come in.

3314. We may fairly take that as some proof that in rural districts the prevalence of the disease is low?—I think undoubtedly so. It is confirmatory of the lessons derived from the other tables.

3315. On the other hand, you have the textile workers who nearly all work in large towns, and among them the incidence is not high?—That is true.

3316. Is there any explanation of that?—It might prove that if the textile towns were treated as a separate group, one might find that their mortality was lower than that of other large towns. I prepared some maps showing the distribution by towns, and I do not recollect that anything very striking in that way came out.

3317. No, nothing very much comes out on those maps?—I think not. The fact that Class 5 is so high suggests, I think, that it is unskilled labour which contributes most to the mortality. The class of person who is affected is not a person in regular steady skilled employment.

3318. Then the main point we can infer from this is that it is amongst the unskilled labouring class that the incidence of the disease and its sequelæ is most prevalent?—I think so, too; and next to that I think there is evidence of a very considerable prevalence in the highest of the five grouped classes.

3319. Evidently a very considerable prevalence. Then you speak of the standardisation of the mortality which you have adopted in the first column of Table 11. What do you mean by standardisation?—The calculation of a modified mortality rate which takes into consideration varied age distribution of the different classes. You see some of these classes, say Class 1, and Class 8, agricultural labourers, have a much larger proportion of elderly men—we are dealing in this table only with men—amongst them than other classes, such as Class 5; so that if the total mortality at all ages were presented unmodified.

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the comparison would not be fair to Class 1 and Class 8, because they contain larger proportions of the ages at which the bulk of the mortality is experienced, therefore the death-rates at the individual age periods are applied to a standard population in each case, and the results of that calculation are given in the first column of the table.

3320. I see you say "The uniformity of the records of these three groups under all four headings—that is the textile, the miners, and the agricultural labourers—is most striking, and affords strong evidence of the general reliability of the syphilis returns as indicative of the relative distribution of the disease"?—I think so, because concomitantly with the low rates from para-syphilitic diseases and aneurism, you get low rates returned for syphilis itself in those three classes.

3321. You have given us a similar figure as to the proportion of deaths occurring in five classes in institutions, and that again shows that Class 5 has a larger percentage of deaths in institutions than any other class?—Yes, very much larger.

3322. That would mean, would it not, as you have said before, a closer diagnosis in the case of that class, and that perhaps places that class in a more unfavourable position in the figures than it should be in?—I think that is so. Again, I think there is another point that must be borne in mind, that the class of person who is likely to die from syphilis is also likely to come down in the world, and so belong at the time of his death to class 5, whatever position in the social scale he started at. At all events, that would apply to a certain number of cases, and would tend to the increase of the mortality in Class 5 from that reason.

3323. Similarly, Class 1 has the smallest number of deaths in institutions, and therefore that class would relatively escape diagnosis, and may have a much larger number of deaths than the figures show?—I think so, especially when one considers that it may be the difficulties of candid certification in cases of private practice are at their maximum in regard to Class 1.

3324. Dealing with aneurism, you argue that because aneurism shows low figures in groups 7 and 8, although miners and agricultural labourers are very subject to strain, the comparative freedom of those classes from syphilis is confirmed?—Yes, it seems to me to be confirmation.

3325. And also that aneurism does to a great extent depend on syphilis?—Yes, I think so. I may say that a survey of the aneurism mortality in the return of occupational mortality, issued as a supplement to the Registrar-General's reports, confirms that opinion; because one finds that aneurism as a cause of death does not vary to any great extent with the degrees to which the various occupations are presumably subjected to strain. There is evidently another factor at work.

3326. Summing up the result of your investigations as far as we have taken them, you come to the conclusion that syphilis is decidedly the most prevalent amongst the highest and lowest of the five classes you deal with?—I think the lowest point in that direction.

3327. In Table 12 you give us figures to help us to an idea of the relative amount of actual mortality from syphilis at different periods?—Yes, mortality returned as due to syphilis.

3328. Will you just tell us what you deduce from those figures?—We go back in these figures to 1850 only. There was a break in continuity in that year, and we could not have gone much further in any case, so we thought it best to begin with 1850. The early part of the curve, when these figures are plotted out on a chart, represents a rapid rise in mortality as certified. Then there follows a period approximately stationary at the comparatively high level reached. Then there is a fall from this level of 80–90 down to the present figure of about 50 or so. But that fall has varied in rapidity at different periods. I think it was in the eighties or nineties that it was most rapid, and it has not been so rapid since then.

3329. Taking the syphilis figures alone, we may say there has been a general tendency towards decrease?—Since about 1880 or 1885.

3330. Taking the figures for aneurism, there is a tendency fairly uniform to increase in the aneurism curve?—I think not of late years. The figures in regard to aneurism must not be taken quite at their face value, because from 1901 onwards there was a change in the methods of classification which gave more prominence to aneurism. If it was mentioned simultaneously with another cause of death on the medical certificate, since that year it has always been preferred to it. Previous to that year that was not done, and so the rates are naturally somewhat higher from 1901 onwards than immediately before 1901. They go up from about 28 or so, to about 32.

3331. In 1902 you say you can begin the general paralysis of the insane curve and the locomotor ataxy curve. The G.P.I. curve very closely follows the syphilis curve, but the locomotor ataxy curve does not show quite the same correspondence?—No, it tends to rise rather.

3332. Taking the syphilis curve, again the effect of the Contagious Diseases Act does not seem to be apparent?—I am not sure of the dates.

3333. I am not certain of the exact date, but there is no sign. The Act was abolished in 1886, after which time a considerable fall took place?—Yes.

3334. Practically I cannot trace anything in the curve as it stands there. The Act was passed in 1864, and then it was at a very high level, and with some fluctuations the disease has maintained a high level. I do not think there is anything in this curve which shows that the Contagious Diseases Act had any considerable effect on your figures?—I think not. They had reached nearly their height before the 1864 Act, and the period of fall is subsequent to 1885.

3335. Yes, I think we may take it that the Contagious Diseases Act, as shown by that, did not produce any marked impression of any sort upon the general population?—So it would seem.

3336. Of course the Act was only in force in certain places; still, it is not traceable?—No.

3337. I suppose no one can assign any reason for the enormous mounting in syphilis between the years 1850 and 1869—the enormously rapid rise, which is rather interesting?—No.

3338. That would not be accounted for by any change in registration?—There was no change in the method of classification that we know of that would account for that rise.

3339. It is a very remarkable rise?—Yes, it is. I think that that rise undoubtedly represents an increase in the number of cases of deaths attributed to syphilis in death certification, though whether that represents an increase in mortality is quite another matter.

3340. You deduce that there are reasons to suppose there may have been a general fall, do you not?—Yes.

3341. Will you please explain your reasons for that?—In the first place, I think the fall in the figures themselves is of some significance. Without support, I do not think one should place implicit confidence in it, but I think the fact that such a large fall has occurred does undoubtedly point to the likelihood of a fall in the actual mortality from syphilis.

3342. The improvement in diagnosis which has occurred would probably have led, other things being equal, to the attribution to dysyphilis of a larger rather than a smaller number of deaths?—Of course that is a change which works in both directions, and there are many others more capable than I of saying in which direction is the preponderant effect. I should have thought myself it was likely that there are more deaths really due to syphilis, but not ascribed to it, than the number of deaths which are wrongly ascribed to syphilis. If that is so, then improvement in diagnosis would undoubtedly tend to increase the mortality attributable to syphilis. Thirdly, there is the remarkable increase which is occurring in institutional deaths in the country.

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3343. Yes, that is shown in Table 13?—I think that has increased something like threefold during the last 40 years or so. If it is true that deaths from syphilis are much more freely certified from institutions, that would tend in itself, other things being equal, to cause a rise in the rate of mortality. Allied to that is the consideration that the proportion of inhabitants of large towns to that of the whole country is steadily increasing, as is shown in Table 15. At the Census of 1851 the population was equally distributed between urban and rural districts, and at the recent Census of 1911, 78 per cent. of the population dwelt in urban and only 22 per cent. in rural districts. I think that change in itself, other things being equal, would have tended to a rise in the rate of mortality from syphilis. The last reason that occurred to me was the fall in mortality from these diseases in the army, the navy, and other returns.

3344. There has been no marked fall in aneurism since 1875, or 1876; I mean nothing like a marked fall?—I think there has been a slight fall, if you take into account the fact that the aneurism figures of the present day read 4 or 5 per million higher than those of the seventies. I think we may take it that the 32 or 33 of the present time correspond to about 28 previous to 1901.

3345. In Table 14 you tabulate the mortality of infants from syphilis, splitting them up into areas, and dividing them between legitimate and illegitimate births?—Yes; that is merely put in to carry the story a little further back than the previous tables, because here we go back to 1906.

3346. In regard to legitimate infants in 1910, in rural countries you have only 0·49 per 1,000, as against 1·05 in the urban counties?—Yes, in 1910.

3347. That is only one-third?—It is less than half. It should be said, though, the distinction between urban and rural there is much less sharp than in the returns for 1911–12, which relate to urban and rural districts. These returns only relate to registration counties, one group of which is selected as predominantly urban, although including, of course, many rural districts, and the other as predominantly rural. Therefore, the degree of difference between the figures of the two is naturally much less than in the later figures.

3348. But while the deaths of legitimate infants are nearly three times as much in the urban counties as in the rural counties, the deaths of illegitimate infants are only twice as much in the urban counties as in the rural counties?—Yes, I think the ratio is more nearly 2 to 1 than 3 to 1 in both cases, is it not? 0·49, and twice that would be 0·98, as against 1·05.

3349. It is only about one-half of the illegitimate figures?—Yes; it is not much below one-half in the legitimate, is it?

3350. But this table brings out the enormous proportion of illegitimate infants who die from syphilis as compared with the number of legitimate ones who so die?—Yes.

3351. It brings it out with very great effect. For all areas you get 7·37 per 1,000 illegitimate infants born who die from syphilis, and 0·88 legitimate?—Yes, the ratio is about 8 to 1, and is very remarkably constant, I think, at that figure, 8 or 10 to 1. Some years ago, in 1908 for instance, it was 10 to 1.

3352. Table 15 is useful as showing the striking changes in the proportion of the population in rural and urban districts. In 1911, 78·1 of the total population lived in urban districts, and only 21·9 in rural districts. In 1851 they were nearly equal?—That is so.

3353. You discuss at some length the forms and complications of syphilis returned on the certificates, and you have given us some tables showing how extraordinarily varied they are?—Yes. The combinations of form of syphilitic disease with individual complications or combinations of complications amount to about 600, I think. I have got a list here which presents them in detail. I felt that to present the total list to the Commission would be asking a little too much of its patience in reading them, so I was obliged to treat the forms of disease by themselves and the complications by themselves. But in this book here I have the com-

binations of the two, and they amount to 17 pages, with 32 entries to the page.

3354. I take it that every one of these detailed diseases or forms of disease are certified on your returns?—Yes, all these are extracted from the returns.

3355. Then you give a list of what you call the more common forms of certificate?—Yes. The first list is a list of the complications not stated to be syphilitic in nature, which are returned along with one form or another of syphilis; whereas the next list, gives the form of syphilitic diseases which are returned.

3356. Everything returned under the second head would come to you as syphilitic?—Yes, they are stated as syphilitic; for instance, gumma of the brain or whatever it may be.

3357. You say the same deaths may be included many times over in Table 17, in which you deal with the number of deaths under several heads?—Yes, because each of those heads is a comprehensive one, and the table is not designed to add up to any total. Each line must be considered individually, and if we enter a case as gumma of the brain it would go in not only under that head, but also under syphilis of the of the nervous system, for instance, and so forth.

3358. In table 38B., you give us gonococcus infection under many separate heads. Would all those deaths be returned as arising from gonorrhœa?—The table or list shows the forms in which they have been returned.

3359. They would all be included in your returns as due to gonorrhœa?—Yes, it is on analogous lines in the annual report, which gives the deaths from gonorrhœa.

3360. Then Table 38 C., which is headed "Purulent Ophthalmia," though those cases might be gonorrhœal in origin, they are not termed gonorrhœa?—We classify them under gonorrhœa.

3361. You do?—Yes. The international list which we follow classifies these diseases as purulent ophthalmia due to gonorrhœa, because the majority of them are due to gonorrhœa. We follow that list, although previously to 1911 we did not do so.

3362. At the present time all these separate forms of disease of the eyes would be classed by you as gonorrhœal?—Yes, that is so, but under separate headings, so that the reader may see they are only returned as purulent ophthalmia.

3363. (*Canon Horsley.*) Do these give the number of cases certified in the first column?—No, the first column is the list number of the heading. The number of cases is stated in brackets after each one.

3364. These are the cases of one disease, and the first is only the numerical nomenclature?—That is so.

3365. (*Chairman.*) Now I come to your proposal as to confidential notification. I understand you make this proposal because you find it is quite impossible to get complete returns of all deaths from venereal diseases in the present circumstances?—Yes, and it is equally impossible to get complete returns from many other causes in the present circumstances.

3366. Your scheme is that the certificate of the cause of death should be treated as confidential?—I think that is the only solution.

3367. Will you state how that will work. To whom would that confidential certificate be sent?—Our proposal is that it should be sent by post by the medical man to the local registrar, who, if our proposals were carried out completely, would be in close touch with the local sanitary authority, and, in fact, would be under the supervision in his work of the medical officer of health. The information is of use to the medical officer of health for certain administrative purposes, and it is desirable that he should have an early notification of the causes of death returned. After that the certificates would be sent up to the General Register Office, with other necessary information added on the same form as the certificate, so that we should be dealing with original certificates instead of, as at present, with registrars' copies of medical men's certificates. If I may give an example of the possible effects of the present system, I may

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mention that recently we came across a death which was certified most legibly as epithelioma of the scalp, a form of cancer, but was copied by the registrar as opisthotonos of the scalp, and was accordingly classified to tetanus.

3368. Then this certificate which is to be sent confidentially is a different one from that which the practitioner gives to the relations?—The only certificate in these circumstances which the practitioner need give to the relations would be a certificate of the fact of death. If the present law were modified in such a way as to require a certificate of the fact of death by a medical man, we should deprecate any certificate of the cause being handed to the relatives at all.

3369. Do you not think that the relatives in many cases would demand a statement of the cause of death?—I think probably they would. But they would be told by their doctor what the cause had been. They probably have been told before death occurs what the cause of the illness is. But in certain cases the doctor does not wish to make a full and candid statement of the cause. We do not wish that he should be prevented from making a full and candid statement to us by the fact that whatever is stated to us must be known also to the relatives.

3370. Then your proposal is that nothing should be recorded publicly for the benefit of the family except the fact of death?—Yes; that is the universal practice, as far as we have been able to ascertain, on the Continent of Europe. Certainly it applies to the most important of the progressive countries on the Continent.

3371. You say that you believe many practitioners would welcome this change in the system. Do you really think they would?—I think so, because at present it is very awkward for those men who have to certify the cause of death of a patient who has died from any of the causes we have in mind.

3372. In nine cases out of ten the disease from which the patient is suffering has been talked about between the doctor and the family, and therefore in those cases there would be no need at all. But in cases where the family are particularly anxious to get a statement from the doctor as to the cause, would they not think there was something suspicious and unpleasant if the doctor refused to give it to them?—I do not think he would refuse to give it to them; he would tell them as much as he thought they ought to know.

3373. (*Sir Kenelm Digby.*) I understand you to say it would apply to all cases?—Yes. I do not think that any partial system would be workable at all, because any partial system would at once excite suspicion.

3374. (*Chairman.*) Then you come to the conclusion, do you not, that a fee would be necessary?—A fee would be necessary, I think, if a certificate of the fact of death was demanded. If it were merely a question of putting in the post a certificate which at present is written and handed to the relatives, I really do not see that that slight difference in procedure would be sufficient to justify a demand for a fee. I have no doubt that the demand would arise. But the question is how far it would justifiably arise.

3375. I see you suggest it would cost about 50,000*l.* a year. That is a serious consideration, is it not?—That would be if certification of the fact of death were required involving a visit. I think it would be quite unreasonable to expect the profession to pay special visits to establish the fact that their patients were dead, without paying them something for their very considerable trouble.

3476. Then with regard to insurance. There are, as you say, insurance offices which insure persons without any medical examination, merely on their written statement that they have never had any venereal diseases?—That is so.

3377. Would these certificates have to be produced in regard to those cases?—I think if the certificates were produced in regard to those cases the effect of the change would be very largely illusory. No one would have confidence in the confidential nature of the certificate, and you would not get candid certificates. So I think it would be necessary to refuse

the production of the certificate; in other words, to treat it as an absolutely confidential document, except where the course of justice demanded its production in a court of law.

3378. As you say, there are insurance companies which are rather sharp in their dealings, and if they could get any evidence of any sort that a disease which an insured person said he had never suffered from was present in him, the policy would be invalid at once?—One may imagine there are insurance companies, or, as I would rather put it, certain agents of insurance companies, who try to carry out sharp practice of that sort. There are also undoubtedly many members of the public who try to impose upon insurance companies.

3379. The effect of your proposal, if it were carried out, would be to give very greatly increased accuracy to the figures of the Registrar-General?—I think there can be no doubt about that.

3380. But it would have no effect upon diminishing the disease?—It could only have indirect effects on the diminution of the disease in so far as knowledge leads to more effective methods of control.

3381. It would give us much greater knowledge than we now possess?—I think so.

3382. And with that knowledge we might be in a better position to take steps to stamp out the disease?—I think so, certainly.

3383. (*Dr. Newsholme.*) With regard to the question of secret certification, I understand that you do not think it absolutely necessary that a certificate should be furnished to the relatives of the fact of death?—No, I think those are two independent proposals.

3384. If, for instance, the local registrar received the confidential certificate, he could furnish the relatives with the certificate of the fact of death, could he not?—Of course, the proposed certificate of the fact of death is a different thing from the one that could be furnished by the relatives. It is proposed, I understand, chiefly as a precaution to ascertain that a death has actually occurred before that death is registered. Occasionally at present we get fictitious registrations of death.

3385. But you think there would not be any greater number of fictitious registrations of death occur under the new conditions than under the old?—Distinctly not.

3386. And without such secret certification of death, you do not think yourself one can expect much greater accuracy of certification than at present?—I think it is too much altogether to expect any medical practitioner to be entirely candid when faced with the certification of such causes of death as we are dealing with.

3387. Turning to another part of your evidence, your hypothesis with regard to the reason why the certification of deaths from syphilis is more untrustworthy than in the case of deaths from general paralysis of the insane, I understood you to suggest that weakly persons were more likely to die of syphilis than from general paralysis of the insane?—Yes, that factor occurred to me as a possible explanation of the difference in the degree of urban preponderance.

3388. Is there not another, and possibly a better explanation of that fact, namely, that deaths from G.P.I. occur almost entirely in asylums, and, therefore, the question of the practitioner not wishing to tell the exact truth does not arise?—Yes, that is true. I think something like 90 per cent. of deaths from G.P.I. occur in asylums.

3389. Ninety per cent. of deaths from general paralysis of the insane, and not more than 30 or 40, I think it was from syphilis, occurred in institutions in urban communities. At any rate, it was somewhere round about that figure?—Yes.

3390. You pointed out that the classification of deaths by the Registrar-General is, in the main, an anatomical one, but this was limited in respect of diseases known to be due to infection. Of course, there are limits to that; that is to say, in a case of pneumonia following after typhus fever, the right entry would be typhus fever, I suppose?—That is a question of selection from two or more jointly certified

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causes of death. The other point is rather as to whether the anatomical or causative basis of classification should be followed. The most prominent exception to the anatomical rule is probably tuberculosis, where all deaths due to that causative agent are classified under that one head, no matter what organ of the body is affected. Whereas, in the more common case, say, of pneumonia, only inflammation of the lungs is classified as pneumonia, and deaths due to the agency of the same organism in other organs or regions of the body are not classified as pneumonia.

3391. Turning to another point, you are proposing in the Registrar-General's Office to extend this dual classification; taking, for instance, the case mentioned by the Chairman of death from burns of the epileptic person?—Yes.

3392. And you will gradually extend that system to a larger number of diseases, or will take certain diseases in certain areas?—Yes, we have begun what we hope will cover the whole field in 10 years. We take, roughly, one-tenth of the list of causes of death in each year, so we hope by the end of 10 years to cover the whole list, and then begin over again, so that each cause would be dealt with once every 10 years instead of once every year.

3393. Even then, I suppose, you would not be likely to meet the requirements of all special investigations into particular causes of death. For instance, if a Commission were appointed five years hence to inquire into rickets as an important cause of death, would your returns give them anything like complete figures of that cause?—No, I presume that Commission would probably like to have special work done, as has been done for this Commission. I may say we are now in a position to undertake any special work of the kind, owing to having a system of greater elasticity than formerly as regards tabulation of causes and so forth.

3394. As a matter of fact, a large number of the deaths due to rickets are really entered under the head of whooping cough or bronchial pneumonia, or difficulty of confinement in a woman who has had difficulty in child-birth rather than the original cause of death, namely, rickets?—That may be so. In the Annual Report for 1911 we give the number of deaths in which whooping cough and rickets or measles and rickets are jointly certified. Such deaths would be listed by us under whooping cough and measles, but they can be ascertained from this report.

3395. You gave a very interesting comparison between the mortality in certain industries comparing the higher social classes with unskilled labour. I suppose these two classes really have some characteristics in common as well as high mortality from syphilis—their irregular occupation, for instance?—Yes. It occurred to me—I would not like to say that I think so definitely—that possibly the element of nervous strain might be more marked at the two ends of the social scale, for different reasons. As the Chairman put it, Class 1 has to exercise its brain most, but, on the other hand, Class 5 is most exposed to vicissitudes and anxieties as to where its next meal is coming from.

3396. Would not the question of alcohol and of dissolute habits come in to a greater extent in both those classes than in the other classes?—I presume that applies to Class 5. I do not know, and I would not like to say one way or the other, but I think that applies to Class 5, because, to a large extent, such habits must bring people into that class.

3397. That is to say, the disease is really the result of the moral conditions which lead them to fall into that class?—Yes, I think so; both with regard to alcohol and to syphilis.

3398. With regard to the very low mortality amongst textile workers and miners, is there any explanation that you can think of why that should be so?—No, I have not been able to think of any.

3399. Might it not be ascribed to the fact that both these classes of workers live under conditions in which public opinion is felt very strongly. The mass of members of the same class influence each other's conduct, and know if there is any lapse from what is commonly known as moral conduct?—That may be so.

3400. At any rate, both classes live in large villages and small towns to a larger extent than in very big towns?—I think the textile workers do live in villages and small towns; but they also live in large towns such as Blackburn and Oldham.

3401. But their social stratum is fairly level and they know each other pretty well and they are all influenced by the same social and moral considerations?—Yes, I think their roots go down pretty deep.

3402. Turning back a moment to the first table in the print, which has not a number attached to it, there is a very interesting classification of the death rate from syphilis in the different county boroughs. Although that relates only to two years and the figures are somewhat small, and you have warned us against attaching too great importance to it, it does seem important to know that a large number of the ports have a very excessive mortality?—Yes, that comes out.

3403. It comes out very clearly?—Yes, especially Devonport and Plymouth.

3404. I cannot think why Birkenhead is so much higher than Liverpool. That is an anomaly which I am not able to explain?—I think, of course, the element of chance in these figures is relatively greater.

(*Dr. Newsholme.*) The rate in Swansea is very low, although it is a port.

(*Sir Almeric Fitzroy.*) So is West Hartlepool.

3405. (*Dr. Newsholme.*) Yes; so that some industries may predominate over others?—Swansea is not a very large port and there happened to be only one or two deaths. I think if you had these figures for a period of 10 years, for instance, you would get some really good information from them.

3406. May I take you back for a moment to the question of confidential certification to the local registrar. You propose, I think, two things: first of all, that the register should be in the hands of the local sanitary authority rather than the Board of Guardians?—That is an outline of the scheme which is at present under consideration by the Registrar-General.

3407. We know there are about three times as many local sanitary authorities as there are Boards of Guardians?—Yes.

3408. Is not that somewhat of a difficulty?—No. On the other hand, I think that will be an advantage, because at present we have to collect the returns in the form of tables, referring to Poor Law Unions, and to convert them laboriously to a form of tables relating to sanitary authorities.

3409. I was thinking rather of the confidential character of the certificates. Some local sanitary authorities are extremely small and have not good official arrangements; not so good, that is, as the Boards of Guardians in some cases?—I think the Registrar-General's position in regard to that would be, in order to meet the demands made by local sanitary authorities for early information, he would be prepared to try a system by which the certificate was sent in the first place to the local sanitary authority. Supposing in practice such a system did not meet with general confidence, he would then wish to press for direct transmission to him of the certificate of the cause of death.

3410. May I point out to you that there is another alternative, namely, confining the administration of this system of registration to county boroughs and county councils—larger authorities altogether?—Yes.

3411. I think you would find that would work better?—Yes, possibly.

3412. Then there is another question. Taking the general curve of mortality from syphilis, there is a rapid rise and then a rather slow fall. I do not think you mentioned, as a possible cause of the rapid rise, the equally rapid growth of the urban population; I did not hear that point mentioned. If you will refer to Table 15 I will develop that point for a moment. Between 1861 and 1871 the urban population increased 7·2 per cent.; in the next decade it increased by 6·1; in the next decade, 4·1, and so on. So that at the time when the mortality from syphilis was increasing to the greatest extent there was also the most rapid aggregation in the urban centres?—Yes, but that

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process of urbanisation has continued, and the recorded rate of mortality from syphilis has fallen.

3413. Then I may add to that that during that period institutional treatment was not increasing quite as rapidly as later?—No, it has increased more later.

3414. And notwithstanding that greater increase in the institutional treatment of syphilis and of other diseases (which means better certification) the registered death rate from syphilis has gone down very markedly?—Yes.

3415. Is it not difficult in those circumstances to believe that the whole decrease is an apparent and not a real one?—I think so. It seems to me to be a good reason for believing there is probably some real decrease. All the factors I can think of that bear on the situation seem to me to point to the reality of the decrease rather than its artificial nature.

3416. (*Mrs. Burgwin.*) Is it not the fact that these textile workers and agricultural labourers marry at a much earlier age than workers in towns?—Yes, I believe so, especially the miners.

3417. I mean to include them?—We only once took out statistics of age at marriage by occupations. That was done in the year 1885. The unfortunate part of that matter, from our point of view, is that most marriages are registered by clergymen, and clergymen, naturally, do not always make the best of registrars from our point of view. That is to say, we cannot expect clergymen to understand the distinctions of occupations from a census point of view; of course, it would be out of question that they should. So that we do not get the degree of precision in the classification of occupations from marriages returned to us by the clergy that we do in the case of births and deaths; so that we are not in the same position to tabulate marriages by occupation as we are to tabulate births and deaths by occupation. The classification was not a very good one, but so far as it went it did show that miners married remarkably early.

3418. Yes, it is within my own knowledge that these three classes do marry quite young. Would you not think, therefore, that accounts for the very low rate of syphilis amongst them?—I certainly think it may be an important contributory cause.

3419. (*Sir John Collie.*) With regard to the proposed alteration in the law of death certification, I take it the certificate supplied by the medical man would be merely a certificate that the person had died?—Supplied to the relatives, do you mean?

3420. Yes?—Yes.

3421. As a matter of fact, the question of the cause of death has been discussed daily, if not hourly, during the man's last illness?—Quite so.

3422. So that there would be no grievance on the part of the relatives not to have in writing what they had verbally probably?—I think not at all. If they have a grievance the remedy is obvious—they have to go to the doctor and say, "Tell us what he really died of."

3423. Then with regard to the question of the fee which you said would be necessary, I take it this certificate that the man had died would involve an actual examination of the body under the regulations you propose?—Yes, that is the proposal.

3424. And that is why a fee would be expected, and very rightly, I think?—Yes, a visit would be involved.

3425. (*Rev. J. Scott Lidgett.*) I notice on page 4 of your statement, where you explain that, as a rule, the seat rather than the nature of the disease is the basis of death classification, you go on to say that: "Classification by nature rather than seat of disease is most appropriate when a causative agent is of great public health importance, relatively easy of recognition, and generally looked for and recorded if met with. These conditions are typically fulfilled by tuberculosis." Then you go on to say that tuberculosis is generally assigned as the cause of death. Would not the same conditions be fulfilled by the diseases we are inquiring about?—Yes. As a matter of fact they are fulfilled. Syphilis is an instance of the kind where we tabulate by the nature of the disease and not by its seat. All deaths certified to us as due to syphilitic disease of any organ or part of the body are brought together and

tabulated under the heading "Syphilis," not under that of the part of the body affected.

3426. I thought we understood, on the former occasion you were here, that many of them were hidden away?—I am referring to our tabulation of the returns as we get them. There is no doubt that many cases are hidden away in the certificates.

3427. We may take it that, in your judgment, the proper policy would be to secure more and more the emphasis on the real cause of death in all such cases?—Yes. Where there is reason to believe that the deceased, at the time of his death, was suffering from syphilis, we do all we can to put ourselves in the position to assign the death to syphilis.

3428. In regard to these classes which fall below the ordinary average, the Chairman said that miners and agriculturists were relatively immune?—Yes.

3429. May I ask to what, in your opinion, that would be due? To less exposure to infection and higher resisting power?—I did not understand the Chairman to mean that there was immunity in the sense of any freedom from the consequence of exposure to infection.

3430. You assented?—In the sense in which I understood the Chairman to use the word "immune."

3431. In the cases of deaths of people in urban institutions who normally reside in rural districts, would those be credited to the urban statistics or to the rural statistics?—To the rural statistics.

3432. In all cases?—In all cases where possible. Of course there are occasional cases where we cannot trace the previous residence of the deceased, and it is necessary to allow the death to appear against the district in which it occurred.

3433. As to the low rate in the textile industries, may I preface my question by saying that I attach the greatest importance to the two considerations urged by Dr. Newsholme and Mrs. Burgwin, namely, first of all, public opinion, and, next, early marriage. But beyond that, is there not less likelihood in the factory system of ordinary promiscuous immorality, and more likelihood that if immorality exists it would be of the ordinary kind and not by resort to prostitution?—That is a point which seemed to me very probably would go far to explain some of these differences. I think it can be inferred from the figures that prostitution is a main cause of the spread of the disease, and that immorality, apart from prostitution, is not, perhaps, of the same importance. At all events, that would be my conjecture.

3434. Class 1, I suppose, bears all the brain workers; but it also bears the burden, I presume, of that comparatively small section of the community known as the "idle rich"?—Certainly.

3435. So that it is not only those who suffer from too much use of their brains, but from too little?—No, I think it includes all those who suffer from too much means.

3436. Then as to the steady fall in the deaths from syphilis in urban districts since about 1890; is it that there was a rise up to a certain date, and then a continuous fall?—That applies to the country as a whole.

3437. Have you any reason to conjecture as to the relative influence of more careful treatment, or of less severity of the disease, or of improvement in moral conditions?—I should not like to hazard any opinion on that point.

3438. You would not care to express an opinion as to any one of those three?—No.

3439. In the case of local registration such as you propose, are you not at all afraid of information leaking out through a local source, or of the possibility that it may leak out?—Yes, I am to some extent uneasy about that, and it was for that reason I referred to the possibility of eliminating the local officer altogether if it were proved, as a matter of experience, that such leakage existed, or that the fear of such leakage led to want of candour in certification. But Dr. Newsholme suggests that, by using the county rather than the local sanitary authority, perhaps that difficulty might be got over.

3440. Then you agree, at any rate, that the fear of such leakage is a very serious difficulty?—I think it is a thing that must be borne in mind.

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3441. Then you spoke of sharp practice on the part of insurance companies who might refuse to pay when it was proved that the insured person had told a falsehood. Would you call that sharp practice?—No, I should not call that sharp practice. What I referred to as possibly sharp practice was the reliance which is spoken of in some of the replies we get of a certain class of insurance agents—I would not like to suggest for a moment that they do it under instructions from their companies—on the probability that the ignorant people with whom they are dealing will not read their policies carefully, and so will sign a declaration of freedom from disease which does not exist.

3442. But I suppose you would say that the demand of insurance companies to know the cause of death is not an unreasonable demand?—I am not sure. Seeing that its effect is so prejudicial to the primary object of certification of the cause of death, which is that of getting to know what the causes of death are, I think that the demands of medical science should come first. Another matter is that the insurance companies could be informed of the cause of death in aggregate of the lives they have at risk, at very slight cost, by means of statistical tables which should be prepared and supplied to them.

3443. But except in a law case when a judge might compel the production of a certificate, would you under all conditions refuse official information at headquarters?—That is what it amounts to.

3444. In your judgment would such confidential registration have any unfavourable effect upon inquiry into possible crime?—No, I think not, because the certificate of cause of death would come before the Registrar as it does at present, and, where necessary, would come before a coroner as it does at present. In fact, I think the possibility of detecting crime would be increased because one would get a medical man interested in the matter in every case, the medical officer of health. At present the registrar is unsupervised in this work of referring to a coroner such cases as ought to be referred to him. He can only get general instructions from the Registrar-General, and every year or two he is visited by an inspector of the Registrar-General. I think the possibilities of detecting crime would be increased if he were working under the direct supervision of the medical officer of health, who would instruct him as to which cases should be referred to the coroner.

3445. Then we may take it, in any case of possible suspicion, the coroner himself would be entitled to have the official certificate of the cause of death?—Undoubtedly. The coroner is the person appointed by law to determine which cases require investigation. Our desire would be to throw upon him the responsibility if he does not investigate.

3446. I notice in one of your tables the very low figure of the general mortality from congenital debility in London, and I am very much surprised it is so low. Have you any idea how that can be accounted for?—Compared with the other large towns of the country, the rates of mortality from most causes in London are low, and I think this is an example. It is in Table 8. The difference after all is 34·0 in London, the maximum being 44·0 in the county boroughs of the Midlands. That of course is not a very great difference. The fact is that these are very stable figures, and very constant for all classes of communities both urban and rural. You get a certain amount of deaths from these causes in all infants, whether they are born in the country or whether they are born in the town, and the preponderance of mortality in town births is quite small in the first month of life; it goes on increasing as children get older when the environment has had, say, 9 or 12 months effect, and the effect of adverse circumstances acting upon children is very much greater. But in deaths in earlier infancy such as these you get comparatively little difference between the mortality in the towns and in the country.

3447. (Canon Horsley.) Going back for one moment, as the representative of the Registrar-General, may I ask you what is the difference between a registrar and a clergyman when he asks a young woman, "What do you do for a living?" Why does a registrar put it down

more accurately than a clergyman?—Because the registrar has had to study the scheme of recording occupations which is issued by the Registrar-General to all registrars for the instruction of enumerators for the purpose of the census.

3448. Then the young lady might say, "My occupation is not on the list"?—There is no list.

3449. Then what is it the registrar has studied?—The instructions.

3450. "Not in the instructions" then?—Quite so. No list contains all possible occupations.

3451. I married a man and asked him what his occupation was. He said, "An artist." The registrar asks him, and he says, "An artist." I went on to say "What sort of artist." He said, "A pavement artist." Would the registrar have gone as far as that, or any further?—If the registrar is worth his salt, I hope he would.

3452. I do the same?—Yes.

3453. I do not think there is very much in that point about the occupation register, because you have to put down what a man tells you is his occupation. In your Table 9 I do not know if you can explain at all the fact that the Soke of Peterborough has a so very much higher syphilis mortality than anywhere else. It is 231 as against 6 in another place, Wiltshire?—That I think merely illustrates the fact that the basis of factor is too small to found significant rates upon. The Soke of Peterborough is one of the smallest of the administrative counties, and it happened by chance there were few deaths from syphilis.

3454. It so happened you say. I have written a great many years on the statistics of intemperance and I have had to draw the attention of the Peterborough people to the fact that it is one of the worst places from a temperance point of view?—It may be significant.

3455. It is rather curious how it comes out. Then as to Table 11, the question of class 5, unskilled labour provided a good deal. Would you include prostitutes under the head of unskilled labourers?—This table refers to males only.

3456. In what class would you put prostitutes?—I do not think that is an occupation we often get returned.

3457. They usually describe themselves as of "no occupation," as they do generally in prison?—Yes, probably.

3458. Then they would unduly load one particular class, would not they? I mean if they all said they had no occupation, you might think they were independent ladies?—Yes, of independent means; they would come in Class 1 in that case.

3459. Then that class would unduly load one of the other classes?—That might be; but that question does not arise on that particular table.

3460. With regard to the statement you make on page 4 of your précis about the causative agent of death, great public importance and so forth, that remark would apply to alcoholism and deaths from it just as much as from syphilis?—Yes. As a matter of fact we tabulate alcoholism doubly every year now.

3461. Medical men are getting more accurate in their certificates?—We give details for every death in connection with which any mention is made of alcohol on the death certificate.

3462. My point is that in a great many cases no mention is made of alcohol any more than syphilis?—Naturally; but we have no control over that.

3463. Then with regard to page 11, the average of Class 1 being so high as it is, in spite of your statement that persons in Class 1 do not die very much in institutions, and that candid certification is less likely to happen, it would, therefore, point to the fact that the evil exists rather more in Class 1 than in any other?—That class is the lowest of the eight classes returned.

3464. I know, but the causes you mention would bring it up a good deal, would they not? It is not far below the average of all classes. Then in the previous paragraph you have given reasons; so that the figure ought to be higher?—Are you referring to page 11?

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3465. Yes?—It is the lowest of the classes returned here, the next lowest being Class 7 with 38 per cent.

3466. It is not far below the average for all classes. That is what you say?—That applies to mortality. I am afraid it is ambiguous. Your reference is to mortality from syphilis, and not to the proportion of deaths in institutions.

3467. Then with regard to a point which has been mentioned by one or two of the others about the inclusion of agricultural labourers and so forth, it has been suggested by Mrs. Burgwin that they marry early. That has an important bearing upon it?—Yes.

3468. My experience is that they would like to marry early, but they cannot because there are no cottages for them?—I believe so.

3469. Far more men would like to marry, but there is no room for them?—I know that miners marry pretty early.

3470. But the house famine in the country is producing a difference?—Yes, one reads that.

3471. Whereas in London, on the other hand, where I have had to make a rule that I would not take more than six couples at one time, early marriages are very common?—Yes.

3472. Then I want to put it in a concrete way about these agriculturists, as to their being so free from syphilitic disease and consequent mortality. Imagine I am a hired man in my village. Supposing I want to commit fornication, I must walk three miles after I have worked 12 hours in the fields and take my chance of finding a prostitute in Maidstone, and when I find her, my wages of 17 shillings a week will hardly meet her demands?—I think that must to a considerable extent affect the question, and I think the financial position affects Class 1.

3473. And opportunity also?—Yes.

3474. Because the brother of my hypothetical hired man is working in London; he has three times the wages, and he cannot walk home without being tempted?—Quite so.

3475. There was a rapid fall in mortality from syphilis after the year 1886?—Yes.

3476. It occurs to me, from my knowledge of what is going on, that it was just about ten years before and after 1886 that there was a very great increase in all forms of rescue work in London. I published about that time a little book called "Cities of Refuge," which gave a list of all the homes in London. Up to that time there were none, for example, to take a Jewish girl who had fallen. There was no real need for it. Then they found a need. I think it might be worth looking into. Probably those 10 years did mark a greater activity in rescue work of all kinds. I happen to know, because about 1886 my prison was closed. I think you will find that will account for the drop in 10 years. Then in the last paragraph but one on page 14 you use the expression, "misfortune would be more serious for the practitioner." What is the misfortune?—That is the offence to the relatives, which is referred to in the same sentence.

3477. When you say misfortune, you mean offence?—The offence of the relatives, if I may say so, is the misfortune of the doctor who attends the case.

3478. You do not mean it was a misfortune that he was not accurate?—No, I mean it is a misfortune for him.

3479. With regard to the possible leakage of information which has been alluded to, from registrars or medical officers of health, the more you diminish the number of people who receive the certificates the less is the likelihood of leakage?—Yes.

3480. At the present moment in the borough of Southwark there are four registrars and one medical officer of health?—But of course the question of leakage cannot arise at the present moment at all, because the document is a public document open to the inspection of everybody who chooses to pay a shilling. So I would not put it in that way. Even if there were leakage, under the other system the state of affairs could not be worse than at present.

3481. I quite agree with you about the necessity of the certificate being kept confidential and so forth. In regard to insurance, many societies issue small

policies without registration. Would you say that in the public interest those societies should be snuffed out? Is it to the advantage of the people that they should be accepted without any inspection whatever?

(*Sir Almeric FitzRoy.*) The Sun Insurance Society does that, and it is one of the biggest in England.

(*Canon Horsley.*) Do they charge very much more than other societies?

(*Sir Almeric FitzRoy.*) No.

3482 (*Canon Horsley.*) I have been chairman for over 30 years of a friendly society, and we would never think of accepting anyone without a medical examination?—I think the companies might fairly be expected either to provide an examination or to charge a rate which would cover the extra risk.

3483. If these certificates are not confidential and are not accurately given in order to save the feelings of the relatives, that might involve a great loss to the insurance society in the case of death. If the certificate is an honest one it involves no loss. In the case of my own friendly society, we have a rule that a sick person shall not be paid when his illness is caused by immoral conduct?—Quite so, but you cannot get that from a death certificate as a rule.

3484. Nor from the medical certificate?—No, not from the medical certificate cause of death, because it is represented to the doctor, "You must not say this, doctor, or we shall not be able to draw his money."

3485. But does not the maxim *Fiat justitia ruat cælum*, come in?—But I am afraid it is not always followed.

3486. But ought not it to come in there?—That you are a better judge of than I am. I am merely dealing with things as they are, and I am afraid it is not always followed, nor will be.

3487. But you see it tends to fraud on the society that pays?—Yes, but I am afraid to a medical man who is certifying a death, the necessities of the widow who is in distress appeal more vividly in some cases than justice to the society.

3488. On the question of sickness, a man is disqualified from the sick pay we are ready to give him if it is brought on by syphilis or drunkenness, but when he hands in a certificate which ascribes it to quite another cause we are deprived of the money?—Of course in every profession there will always be a certain number of persons who will be prepared to modify their views in accordance with considerations of that sort. I suppose there is a way of getting to know who will give certificates of the kind that are wanted and who will not, and so there is a premium, in other words, under such a system as you are speaking of on dishonesty among practitioners.

3489. It is a financial question as well as a moral one, because if doctors are in the habit of giving inaccurate certificates, societies must charge higher rates. Take another case. There was a man employed at Woolwich Arsenal whom I knew very well. He was a drunkard and ought to have been discharged over and over again. I said to him, "How do you account for your absences?" He said, "The doctor always gives me a certificate." "What is on it?" I asked. "Chronic gastritis," he replied. In that case it was not fair to the Arsenal to keep him on.

(*Chairman.*) I may point out that Dr. Stevenson has nothing to do with any certificates, except certificates of death. The doctors are responsible to him only for returning deaths.

3490. (*Canon Horsley.*) But in the case of a death there is a financial loss to the insurance society who has to pay?—Yes, that would be so; but of course the Registrar-General has no control over medical practitioners.

3491. But all these examples you give, and these interesting figures here, seem to show me the pressing importance of telling that to doctors. It is a very good argument for confidential certificates and honest certificates?—Yes; but as long as the certificate is not confidential, there are strong considerations working in the other direction.

3492. That leads to frauds on the societies, and the money would not have been drawn by the relatives if the truth had been known?—Yes.

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[Continued.]

3493. Then in such a case a doctor becomes accessory to the fraud. That is the conclusion, is it not? With regard to the anatomical basis of classification, that is not always quite accurate, is it; I mean it is not always the truest way of describing it?—I think that is a question of what is practicable. For instance, to take the examples that I quote here, we can catalogue the number of the deaths from pneumonia; but if we went into the causes of pneumonia we should utterly fail in the present condition of certification to be able to tabulate the number of deaths due to any of the organisms that bring about pneumonia. In other cases we can do it. Take the case of tubercle; there we can do it.

3494. I want to point out that your basis is not always quite accurate. I had a doctor under me some time ago. I know well what the anatomical basis would be. It was that he died by falling from a platform in Wandsworth, and dislocated his neck. The real fact was he was hanged. The anatomical point of view is that he fell from a platform?—Yes; but, as I say, it has never been universally applied. It has been rather a general basis of classification than one at all rigidly adhered to.

(Canon Horsley.) I am not quite sure whether friendly societies accept the position that doctors ought not to be expected to do anything to relieve the feelings of patients; if so they would have to put their rates up, because at the present moment they are called upon to pay in cases where they ought not to pay, whether for sickness or for death.

3495. (Dr. Mott.) With regard to Table 11, there does not seem to be quite that parallelism between aneurism as affecting different classes and general paralysis and locomotor ataxy?—The parallelism is not absolute. Of course you never get absolute parallelism.

3496. No; but it seems to me the reason of that is that physical stress plays an important part in connection with aneurism?—Yes, I think so, too.

3497. And it seems to be shown in this table. You would admit that?—I think we cannot ignore the element of strain at all.

3498. I think it would be very interesting if you would include the females as well as the males, because I think you would find then, as I have found, in analysing these statistics for the London County Asylums, that you would have very few female paralytics in Classes 1, 2, 3, and 4, as compared with Class 5?—The reason why the females were not included with the males was because the description of the occupation in the case of females is much less satisfactory than in the case of males.

3499. But could you not group them according to social grade at all?—In this table social grade is deduced from occupation. That is the only means we have of arriving at it.

3500. Because I find that as you sink in the social scale, so you get an increased number of cases relatively of female paralytics and of women suffering with locomotor ataxy. That is most marked?—Yes, I think I have seen a reference to that. We may be in a position to do that to a certain extent for the year 1913. But the basis of facts would be very small, and I am afraid we might get at a result similar to that for the individual counties.

3501. It would be interesting to see whether some of the towns can be compared. For example, I remember a late Chairman of the Asylums Committee at Nottingham once asking me how it was there were so many female paralytics there as compared with other large towns. I think if you went into the facts with regard to some of these towns, you would find some correlation between the character of the population and industry and the amount of general paralysis in the two sexes. Inasmuch as practically almost every case of general paralysis is known, because they die in an institution, and the disease is registered as such, it seems to me to afford a direct indication of the state of syphilis in the town. It has been worked out, I believe, in Hungary or Germany to give an idea of the prevalence of syphilis. I merely suggest that to you?—If it were possible we should be glad to do it; but I

am afraid, taking into consideration the fact that the basis of fact in the case of the female is so much smaller, and, secondly, that the basis of occupation is as a rule much worse—

3502. But could you not get out some such basis as this: the number of paralytics in one city of 200,000 as compared with a rural district of 200,000, or something like that?—Yes, we have returns for general paralysis and locomotor ataxy taken together for individual counties and county boroughs.

(Dr. Mott.) I meant, rather, compare two large towns where large numbers of young men and women are employed in some particular industry, because they earn as much wages very often as their parents.

3503. (Mrs. Scharlieb.) Might it have been useful to put in a table showing the number of women dying of gonorrhœa and its effects, especially its effect on the pelvic organs, or any other specially serious effects?—We do tabulate all the deaths attributable to gonorrhœa.

3504. Is it amongst your tables?—No, it is in the annual report already distributed. The number of deaths ascribed to gonorrhœa is quite small. Speaking from memory it is under 30.

3505. But they would not include pyosalpinx and pelvic abscesses and so on?—No. The number of deaths from pelvic conditions which are generally dependent on gonorrhœa I think was 735 in a single year; but then one could not say what proportion of those deaths was actually due to gonorrhœa.

3506. Would you like practitioners when they can to tell you when it is tubercle, gonorrhœa, and so on?—Yes.

3507. Because I am very much afraid of gonorrhœa being forgotten?—Yes. Of course if it were returned as tubercle it would not be returned in those 735. It would be returned as tubercle, and not a local condition.

3508. So that the great majority of deaths from these pelvic diseases of women are presumably due to gonorrhœa?—Yes.

3509. I mean such diseases as pyosalpinx and so on?—Yes.

3510. (Mrs. Creighton.) With regard to your suggestion about confidential registration, I suppose it would be only valuable for statistical purposes?—Yes; the primary object, I take it, of registration of the cause of death is for the purpose of statistics.

3511. Could you point out the way in which your having that confidential registration would lead to an improvement with regard to these diseases?—Yes, certainly; I think we should get much fuller information than we do now as to the mortality resulting from them; and not only in these diseases but many others.

3512. But how would you use that information for the benefit of the public health?—It does not fall to my province to use it, but to record it. I think those to whom it does fall to attempt to exercise control over the spread of disease would be in a better position to do so if they had better information.

3513. Even in regard to this confidential form, you do not suggest following up the information as regards persons, of course?—No; I think it would be fatal to attempt to run both those objects concurrently. I think the attempt to secure the one object would defeat the other. In other words, if you followed up the cases notified, you would soon cease to get any cases to follow up.

3514. Do you think the same thing would apply if the cases in a particular district were followed up?—Yes. I think so far as you followed up the cases, you would cease to get them returned.

3515. I mean supposing there came to your knowledge what seemed to you to be a large number of cases from a special district, you would not think it wise to order an inquiry into the conditions?—There might certainly be an inquiry, but I do not think the inquirer should have access to the returns of the Registrar-General as to the causes of death of individuals.

3516. Do you think that is one way in which confidential registration might be of use?—Certainly.

3517. To follow up a large number of cases in a particular district; I mean not individually, but to

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[Continued.]

investigate the conditions of the district?—Yes; so long as the investigator went down with no knowledge except a statistical one of the prevalence of disease in that district, I certainly think that would be useful. But I would deprecate his having access to the registers to know in which household any particular disease had been recorded.

(*Mr. Lane.*) I have no questions.

(*Sir Almeric FitzRoy.*) I think I shall suit your convenience by putting no questions.

3518. (*Chairman.*) I think you told Mr. Scott Lidgett that you thought prostitutes were mainly responsible for the spread of disease?—I hope I did not say mainly; I meant to say largely.

3519. In that case you mean prostitutes in the broad sense?—Yes.

3520. Because we are nearly certain, as you know, that the professional prostitute is not the principal factor in spreading disease?—That is so, I understand, in continental countries where the professional prostitute is subject to strict surveillance. The only reason I hazard an opinion at all is because of the relative amount of mortality in large towns, which I think is in harmony with the view, and also to a certain extent on account of the comparatively high mortality of Class I, which I think is also in harmony with that view, since it has already been put, I think, that this is a financial question.

3521. In both cases clandestine prostitution is an important factor?—Yes.

3522. Do you know of any means of estimating the amount of mortality which might be ascribed to such cases as arterial sclerosis, which may be of syphilitic origin as far as we know?—As far as I have been able to gather the opinion of the medical profession, there is a considerable difference of opinion as to the extent to which general arterial disease is due to syphilis. It occurred to me it would be a very feasible line of inquiry to get some of the larger hospitals to test the reaction to the Wassermann test of their patients who were diagnosed as suffering from arterial sclerosis and other arterial diseases, as against an equal number of patients suffering from diseases which there is no reason to connect with syphilis at all. I think you would then get an idea of the extent to which these cases of arterial disease are really due to syphilis.

3523. You think that would be important information from our point of view?—I think so.

3524. Have you any views regarding compulsory notification of disease? I do not mean notification of the kind you spoke of just now, but notification with a view to treatment?—My consideration of the whole matter has strongly influenced me against the desirability of such notification or registration of venereal disease. It seems to me that the possibilities limit themselves in the first place to innominal notification or notification without a name, as is carried on, I believe, in Copenhagen, and in private practice in New York and elsewhere. If you get notification without name, then there are again two alternatives; either you pay for it or you do not. If you pay for it, you will get plenty of notifications it seems to me. But I should attribute very little value to them, because there is nothing whatever as far as I can see to prevent an unscrupulous practitioner from manufacturing cases, and simultaneously two-and-sixpences, to any extent he may desire. On the other hand, if you do not pay for it, it seems to me you will get very little notification. You have no control whatever over the practitioner. If he does not choose to take the trouble to notify his cases, you have no means of proving that he had any cases; so that I am afraid that form of notification without the names again would be of very little value. Then, if you could get good notification without names, it seems to me its only possible value would be a statistical one. If you notify cases by name, and register them in that way, and then attempt to make any administrative use of the information so obtained, I am afraid that the only, or one very large effect would be to deter people from going for treatment to the doctor by whom they knew their disease would be registered. I am afraid the effect of that would be to drive them into the hands of quacks and

unscrupulous practitioners probably who might, for a consideration, refrain from notification. So that it does seem to me that by far the best plan, if I may say so, would be to act upon the lines of the recent report to the Local Government Board, and endeavour to get the people to notify themselves by making diagnosis and treatment pleasant and effective for them. I think that sufferers from these forms of disease are just as anxious as anybody else to get rid of them, and if they knew they could be efficiently and confidentially treated in general hospitals and it would not be known to the neighbours what was the nature of their disease, as soon as confidence in that treatment was established you would cease to have any need for special means of notification because the people would come voluntarily.

3525. (*Sir Kenelm Digby.*) Your suggested confidential certificate would require legislation, would it not?—Certainly.

3526. That is to say, at present there is a statutory obligation to certify not only the fact but the cause of death on the same certificate?—Yes; the present practice of registration is very strictly defined by statute.

3527. That will have to be altered?—Yes, entirely.

3528. Therefore, if you introduce this form of confidential certificate, that again probably will have to be regulated by legislation in lieu of the present mode of certifying?—No change of the kind could be introduced without legislation.

3529. Therefore, you would practically put the medical practitioner under a statutory obligation to forward this confidential certificate?—Yes.

3530. Do you not think if he did that, that is a public service, and ought to be paid for?—I think the question is open to debate whether the present service of furnishing a certificate should be paid for.

3531. I rather think you have the fear of the Treasury before your eyes?—My position is this. Either the present certificate should be paid for or should not. If it should be paid for, then the other should be. But I do not think the mere difference of putting in the post as against handing to a relative is sufficient in itself to turn the balance.

3532. Still, if you put the medical man under a statutory obligation to forward a certificate of a certain kind for a certain public purpose, that does seem to me to be a service which might very fairly be paid for?—Yes. But I should like there to refer to what is ascertained to be the feeling of the profession in America. I have put in this report of mine a statement that there the profession has been so active in pressing forward registration that the public think they have a private axe of their own to grind. Although the duty of registration is thrown to a greater extent, in the United States on the profession than it is in this country.

3533. On the whole, would you not get better results if it was paid for? Would not a medical man be under a stricter obligation almost to do it?—I would like to see it paid for.

3534. You think, on the whole, it would be better for its efficiency?—I think anything that takes away any possible sense of grievance would probably tend towards efficiency. We often get replies at present saying, "I am not going to give you any more information unless I am paid for it."

3535. Then, with regard to the confidential character of this mode of certifying, which is a matter of extreme importance, that again would have to be regulated by statute?—Yes, it would.

3536. A case which strikes me as somewhat parallel, of which we have experience at the present day, is the confidential character of the originals of telegrams?—Yes.

3537. The Post Office officials are under an obligation not to disclose the originals of telegrams or any letter, in fact, but a telegram is the best instance, without a warrant from the Home Secretary?—Yes, that works all right.

3538. It works extremely well. The Secretary of State, of course, has constantly to consider the question, whether it is desirable to issue his warrant,

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[Continued.]

or whether it is not. Of course, there again it could be produced, for instance, to a court of justice under a subpoena?—Yes. I think our fear is rather that it might take more time to establish public confidence in the confidential nature of the certificate than feel any great fear that there would be a large amount of breach of confidence on the part of officials.

3539. Still, if it was really desirable in the public interest it should be so, you see no reason why there should not be provisions of that kind protecting the confidential character of the certificate?—I see no reason at all.

3540. For the purposes of justice, of course that is comparatively easy to provide for?—No matter what provisions were made, I take it a court of law would always have power to order the production of a certificate.

3541. But clearly it would be necessary it should be?—Yes.

3542. The opposition you fear rather is from the insurance companies, or at all events from some of the insurance companies?—I think it is very probable there would be opposition on the part of some of the insurance companies.

3543. You meet that by saying that the objections of the insurance companies are of a character which really rather afford an additional argument in favour of the confidential character of these certificates?—Yes, I think it might be put that way.

3544. But at present they are practically of little use for any good purpose and may be used for some improper purpose?—As I point out, I have very little first-hand knowledge indeed of this matter. I am only judging from the replies I receive, of which I have given you some examples.

3545. Though it is not exactly legal evidence, that at all events gives you a great deal of experience?—Certainly, we get experience in that way. We get experience of the particular effect of this insurance consideration upon our returns.

3546. You especially refer to these insurance companies which do not require a medical certificate?—Yes; I think it is with them that the difficulty arises.

3547. And you say, it seems to me with very great force, that it is a very great need at present that poor people sign insurance policies which contain all sorts of obligations without at all understanding the obligations they are undertaking, and find in many cases, sometimes during life or after death, the policy

has become ineffective in consequence of non-compliance with some of the obligations of which they had no idea?—Yes.

3548. For instance, if a man has said he has not one of these 700 diseases which you have mentioned to-day?—We get replies which show that that is so.

3549. That is a widespread source of misery?—Yes, I think the remedy is obvious: that either the company should provide a medical examination, or if they choose not to do so, they should charge a rate which will enable them to do without these conditions.

3550. So that you do not feel very much pressed by the objections of the insurance companies?—No. As regards the equity of the matter between the Registrar-General and the insurance companies I feel no hesitation at all.

3551. You say, "The laws of European states seem all to provide for a confidential certificate, and if this is included in the entry of the death in registration, no copy may include the cause of death except one required for its information by a court of law"?—That is so.

3552. That is the Swiss law?—That is the Swiss law; but it applies generally so far as we have been able to ascertain.

3553. That is the law in all the European states, I think you say?—Certainly, in all the important states. Either the cause of death is not entered in the register at all—it is a separate document and is separately treated—or if it is entered in the register, then a complete copy of the register entry is not permitted by the law of the land, but only an excerpt containing certain specified particulars.

3554. And you think the law should be amended in that direction?—I certainly do.

3555. (Chairman.) If the confidential certificate were given and was not shown or was not able to be shown to the insurance company, the insurance company would be in exactly the same position that they are now?—Not exactly in the same position; because as I understand the matter now, they demand a copy of the certificate as proof of death, and on that copy they find stated amongst other things the cause of death.

3556. They would get the proof of death?—Yes, they would get the proof of death; but they would not get what they do at present, that is, a statement of the cause of death.

(Chairman.) Thank you very much. You have taken a great deal of trouble for us.

The witness withdrew.

ELEVENTH DAY.

Monday, 19th January 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Lieutenant-Colonel GIBBARD called and examined.

3557. (Chairman.) You are the head of the Military Hospital at Rochester Row?—Yes.

3558. How long have you held that post?—For 3½ years.

3559. Does that hospital serve the London com-

mand only?—It is the centre of instruction for venereal diseases for the Army.

3560. It is a school of instruction as well as being a hospital?—Yes, as well as being a hospital for venereal disease for the London district.

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[Continued.]

3561. How many troops does your hospital serve ?
—About 5,000.

3562. You have also had considerable experience in India, have you not?—Yes.

3563. Of the same class?—Of the same class. I was in charge of the venereal section of the military hospitals at Umballa, and also at Rawal Pindi, two of the largest military stations in India.

3564. We have all been struck very much by the marked decrease in the venereal diseases in the Army, both at home and abroad, and I see you assign that decrease to five chief causes. I propose to deal with those causes as you enumerate them in turn. You place improved treatment first, and you lay great stress on early treatment?—Yes.

3565. May we assume that early diagnosis is certain if the infected person will place himself in the hands of a competent medical man?—It is certain with a competent medical man.

3566. I suppose we could classify diagnosis under three heads, clinical observation, microscopical observation, and Wassermann reaction?—Yes; clinical observation, microscopical, and Wassermann.

3567. Would you tell us the procedure when a man comes to you at Rochester Row?—When a man reports sick we first look for *spirochæta pallida*, if he has a venereal sore. If the *spirochæta pallida* is found the case is diagnosed syphilis at once, and treated as such at once. If the *spirochæta pallida* is not found, which it would not be if the patient has been using any antiseptic to the sore, we dress the sore with saline solution or distilled water for three days. Then we look again. If we still find no *spirochæta pallida*, we keep the case under observation for two months. During that period we test the man's blood, first on admission, at the end of the first month, and at the end of the second month. If his blood test gives a positive Wassermann result at any time, the case is diagnosed as syphilis, because we know from experience that a positive Wassermann is the earliest indication of syphilis in such cases.

3568. Broadly speaking, how long does it take in the average for you to arrive at the absolute diagnosis of syphilis, and then proceed to treatment?—In the ordinary case it might take five minutes, three or four minutes.

3569. In the ordinary case?—In the ordinary case. If it is a syphilitic chancre you can find the *spirochætes*.

3570. But if antiseptics have been used, then diagnosis might require a longer period of observation?—Yes, the antiseptics drive the *spirochætes* away; you have to wait a few days before you look again.

3571. Having diagnosed a case as syphilitic, will you state briefly the treatment you have found most effective?—The treatment we have found most effective is one injection of salvarsan, '6 of a gramme, intravenously, followed by five weekly injections of mercurial cream, then another intravenous injection of salvarsan, five more mercurial injections, and a final injection of salvarsan. That is our latest treatment which we have been using for the last year. Before that we gave one injection of salvarsan, nine weekly injections of mercury, and a final injection of salvarsan. With those two methods of treatment we have never seen a man develop secondary symptoms. We have aborted the disease and apparently cured the man in every case.

3572. Did you read a letter from Dr. Thomas Dutton in the "Medical Times" of 20th December?—No.

3573. He states in that letter: "We are following the usual fanatical way of rushing some new German treatment and using a dangerous expensive drug like salvarsan." He goes on: "Then why use it? when we have mercury, arsenic, antimony and iodides, which we know are cures when used scientifically alone or combined in the majority of cases." That is not your view at all?—No. It is not.

3574. So that all your experience has gone to show that salvarsan can be safely used, and is, in connection with mercury, the most effective cure known?—Much the most effective, and can be safely used

provided that the medical man who is using it has acquired and knows thoroughly the technique and the contra indications.

3575. The letter goes on to say: "These naval and military surgeons should be bound to explain all the dangers of this dangerous treatment before using it on men in the services." I understand you have found no danger and have had no deaths or after effects?—None.

3576. Is your treatment known to the profession generally?—Yes, it has been published in all the medical papers.

3577. Then we may take it that a letter or any statements of this kind are to be absolutely disregarded as showing want of knowledge of the writer?—Yes, it does, especially as regards mercury. We have found that over 40 per cent. of the cases treated for two years with mercury give a positive Wassermann result.

3578. Your experience is confined to men of rather more than the average physique between the ages of 17 and 25?—Yes.

3579. And the treatment might require modification in other cases of more delicate subjects?—Yes.

3580. I see, you say that salvarsan renders a patient non-infectious in 24 or 48 hours. How long does that period of non-infectivity last?—I am speaking there of cases of chancre in which *spirochæta pallida* are found; 24 or 48 hours after administration of salvarsan you find no *spirochætes*. The sore will heal quickly, perhaps in eight or ten days, and there is no return of infective symptoms.

3581. Does that mean that the patient is no longer infective?—Yes, he is no longer infective.

3582. You have given us a very interesting table of relapses, and in that table you distinguish between clinical and Wassermann cases. I am not quite clear what it means. Does it mean that in one category relapse was indicated by clinical observation, and in the other it was detected by Wassermann reaction?—Yes.

3583. Might a relapse escape observation for some time if the Wassermann was not applied?—Yes, it would certainly.

3584. The result of that table is that there was only 11.4 per cent. of cases of relapses after treatment of primary, as against 33.8 per cent., nearly three times as many, after treatment of secondary?—Yes.

3585. That strikingly brings out the advantage of treatment at the earliest possible stage?—Yes.

3586. But it does show that a certain number of relapses have to be expected?—Yes, they are chiefly Wassermann relapses, blood relapses. We are guided for our future treatment by the Wassermann test.

3587. I suppose all the cases in that table were cases treated with salvarsan?—Yes, all treated with salvarsan.

3588. Then you state that in 62 cases treated with salvarsan of primary syphilis under observation for six to nine months, all but three gave persistent negative reactions?—Yes.

3589. And the only relapse was probably from re-infection?—Yes.

3590. That may be considered as a very satisfactory result?—Very. I should think certainly it was re-infection after nine months.

3591. Now I come to Table 3 which you have given us and which is a very useful table. That is a table of "total relapses and average time lost by each soldier in hospital and attending as an out-patient, &c." you say, "during the first year." What does that mean?—During the first year of treatment—after the man reports sick—his first year of treatment.

3592. The net effect of that table is to show that the combined treatment of mercury and salvarsan reduces the average number of days in hospital on first admission from 42 to 23.2, and produces only six relapses as against 315 relapses, and gives a percentage of 3.9 relapses as against 33 for mercury alone; and it also shows the average time lost by each man treated with mercury and salvarsan was far less than if treated with mercury alone?—Yes.

3593. Then we may take it that that table is conclusive, as far as it goes, of the superiority of the

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combined treatment of mercury and salvarsan as against mercury alone?—Yes, we can.

3594. It is conclusive?—Yes; the table was very carefully prepared.

3595. Is it your experience that syphilis now appears in less acute forms than it used to do some years ago?—Yes; it is not such a virulent form of disease now.

3596. How long do you now consider it takes to cure a patient if he is taken in the primary stage?—In the majority of cases we find one course of treatment, combined salvarsan and mercury sufficient; that takes two months. But in a certain percentage, I cannot tell you exactly without referring to my statistics, but probably 17 per cent., the Wassermann result returns to a positive, and the man requires another course of treatment.

3597. I suppose in cases which have got into the secondary stage the time is considerably extended?—Yes, it takes longer.

3598. Have you come across persistent cases which do not yield at all to treatment?—I have come across no cases in which clinical symptoms were not cleared up, but I have come across cases in which the Wassermann result has been persistent.

3599. Over a long period of time?—Yes, we are following those cases now. We are keeping a special record of them to see whether we can get it negative.

3600. Do you find among the soldiers in your hospital many cases of reinfections during treatment?—No, very few.

3601. Can a man who suffers from syphilis in all its stages go on carrying on infection?—Before he is cured he carries infection.

3602. I mean, is he likely to spread infection?—Yes.

3603. And the disease in its infective stage does not act as a check on the passions?—No, not at all.

3604. At what period in the soldier's career do you find he is most liable to contract these diseases; is it early or late?—I should think during his first year or so, the early part of his service when he is a young soldier. He joins the Army, perhaps from the country, not knowing there is such a disease as venereal.

3605. After he has tidied over his first period, he is less likely to fall?—Yes.

3606. Do you think the marked decrease of disease among the troops is sufficient to produce a sensible diminution of it among the civil population in our garrison towns?—No, I do not think so.

3607. Not to make any impression upon them?—Not sufficient to make an impression upon them.

3608. May we take it that the disease amongst soldiers cannot escape observation now?—No, there is no escape from observation. We have our period of observation laid down. Every man is given a syphilis case sheet when he contracts syphilis. Every man contracting syphilis has a syphilis case sheet made out for him.

3609. But he cannot conceal his disease before he comes to you?—No.

3610. Not for long, at all events?—No, not for long.

3611. (*Sir Kenelm Digby*.) I do not quite understand. Is every man given a syphilis case sheet then, only after he has contracted syphilis?—Yes, after he has contracted syphilis. That is to ensure continuous treatment and observation.

3612. (*Chairman*.) And this form is given directly syphilis is diagnosed?—Yes.

3613. And then followed up?—Yes, it is followed up. No matter where the man goes, that is sent to his station. He is also given a card of instruction.

3614. We will come to that. Is a soldier now punished if he is found concealing one of these diseases?—Yes. If he is found concealing it, he can be punished under the Army Act.

3615. If a man is discharged to the reserve, and he is under treatment for these venereal diseases, will he be detained until he is cured?—One would offer to detain him, but you cannot compel his detention in the hospital. As far as possible we endeavour to render the man non-infectious before he leaves the Army, and there is a regulation (*handing regulation*

in) under which we can keep a man in the hospital, but not against his will.

3616. Of course that merely allows a discharged soldier who, on account of his illness, is not able to proceed to his home, to be subsisted in hospital under the regulations; but that does not deal with the disease?—No.

3617. And you have no power to keep an infective soldier?—No, but as a rule they stay. They like to finish their treatment before they leave, and under that power, as a rule, we can keep them.

3618. Now you speak of lectures and talks to the soldiers as one of the causes of decreasing the disease. Will you tell us exactly what you do?—At the depôts, where there are recruits, the men are spoken to; for instance, in the London District at the Guards Depot at Caterham, they are spoken to every six months, and as part of the lectures on preventible diseases and personal hygiene a point is made of venereal disease. I think that is done generally.

3619. I think that is done throughout the Army now?—Yes, I think so. One point we always make, or at least I have always made, and I have heard others do the same, is that of speaking to the men about continence. We always advise that and make a point of it.

3620. Then when you have the man in hospital, you talk to him, I suppose?—Yes. When he is admitted to hospital, we give him a little card of instruction, which tells him about the disease and the importance of continuing to attend for observation even though he has no symptoms. May I pass these round (*handing round the same*). This card is in the press now being revised.

3621. Do you think the talks that you have with soldiers in hospital and the issue of these cards does safeguard them against re-infection after they have been cured?—Yes, it does to a certain extent. Very few men after seeing bad cases in hospital will expose themselves to infection again. Many men have told me that.

3622. And I see you state that you have now reduced the proportion of primary to secondary admissions from 1 and 5 to 1 and 1. That must be a great advantage?—Yes, it is.

3623. And you have done that entirely by talking to the men?—By talking to the men and advising them. That is what we have done in the London District.

3624. Then you lay great stress on the increased attractions in barracks and on outdoor sports generally?—Yes.

3625. Do you think that apart from the fuller occupation of the time of the men, a soldier who is addicted to healthy open air exercises becomes less liable to temptation?—Yes. He has less time to go about the town and spend his time in the canteen drinking. He is tired in the evening.

3626. Do you think it is the soldier who is in a less fit bodily state who is less liable?—No, I do not think so.

3627. You think it all depends upon the occupation of the time of the men?—Yes. May I read a short paragraph from the Army Medical Report, published two or three days ago upon that point. This is the report on the health of the Army for the year 1912: "The still further decrease in the ratio of admissions for venereal diseases is most satisfactory. In the table which follows it will be noted that in the Aldershot Command the ratio of admissions for these complaints is far below that of any other command in the United Kingdom, and may be attributable to the facilities for healthy recreation which exists in this command. The effects of hard work and the encouragement of sports among the men as an incentive to clean living are admitted."

3628. Do not you think that fact would also be due to the absence of opportunity at Aldershot as compared with a town like London?—Yes, it may be partly. At large or seaport towns there is more venereal.

3629. The temptation is greater and there is more prevalence of disease probably?—Yes.

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[Continued.]

3630. Can you explain how the Cantonment Acts were worked in India while you were there?—At the stations I was at, if a soldier reported sick with venereal disease he was asked where he got it, if he knew the woman, and could recognise her. If he could, he was sent with hospital assistants from the cantonment hospital to the bazaar to recognise the woman. He pointed her out, and she was dealt with under the Cantonment Act. She was given the opportunity of treatment, if necessary, or of being examined, and I have never known any native woman refuse to be examined or refuse treatment; they are only too glad to get treatment if necessary.

3631. Do you think that the Acts work in different ways in different cantonments, and therefore nothing can be drawn as to their advantage?—I think they may be carried out differently in different cantonments.

3632. You think there is no evidence that the general operation of the Acts as they are now worked has really tended to check disease?—I do not think so.

3633. Supposing these Acts have any protective value, do they protect the native soldier as well as the British soldier?—No, I do not think they would. They are mostly married men. A great point about the native soldier is that he drinks less.

3634. You have given us tables of admissions per thousand of strength for seven years, 1900 to 1906. That shows in British troops the reduction in admissions have been from 298 to 117·3, and for native troops a reduction of 42·6 to 16·2; so that the reduction is approximately the same, though slightly greater in the native troops?—Yes.

3635. Do you think that that means decrease in the prevalence of disease in the cantonments?—I think it points towards it. I do not know in what other way to explain it.

3636. This great diminution in the native army is new to me and I think to most of us, and I should rather like to know to what cause it can be ascribed, if there is a cause?—I can think of no cause except the decrease of prevalence generally; I do not know whether that is the cause.

3637. Are native troops taught to avoid venereal diseases?—I do not know, I am not sure.

3638. And I suppose there is no doubt that increased temperance has been a contributing cause?—I think it is a great cause.

3639. Do your patients ever tell you that their infection was due to their having drunk too much?—Yes. Most men tell you, if you ask them, that they had had too much.

3640. You tell us that the average daily consumption of beer by soldiers in India has been reduced in six years from two quarts to 2½ pints. Do you think the consumption at home has fallen proportionately amongst soldiers?—I do not know.

3641. You have no means of ascertaining that?—No.

3642. What do you think would be the effect of opium taken by the native troops upon their liability to venereal diseases?—I do not think it would increase the liability.

3643. You do not think it would increase it or diminish it; it would have no effect?—I do not think it would have any marked effect.

3644. Then you turn to education which you say occupies much more of the soldiers' time now than formerly. Do you think that the decrease or the proportion of decrease which is due to education, comes from greater occupation of time or from a higher moral standard which education has tended to produce?—A soldier entering the Army now is better educated than years ago, and I think you will find more men in the Army now who have a second class or first class certificate of education, which raises their moral tone.

3645. There probably has been a general rise in moral tone which has contributed to the reduction?—Yes.

3646. I see you say that of the six causes you have mentioned, you think that improved treatment and instruction have been the most important factors?—Yes.

3647. Do the tabulated statistics of the Army health show any jump after the years when these two causes, improved treatment and spread of instruction, became operative? Can it be traced in the curves at all?—I am not sure of the years when it did occur. I have not got the other figures either. I am not sure of the years when improved treatment took place, but I should think about 15 years ago.

3648. Yes, somewhere about that. Now with the very improved treatment that you have been able to establish and has now become general in the Army, I suppose you expect a further fall?—Yes, a great decrease.

3649. Have you in your experience come across cases of congenital syphilis?—No, not often in soldiers.

3650. And do you come across cases which are certainly cases of innocent infection, infection acquired not sexually?—I have come across several cases of extra-genital chancre. I have had a police constable with a chancre on his finger, for instance, and I have had a man with a chancre on the lip; but not many.

3651. I daresay you know that this Commission is especially concerned with the prevention of diseases among the civil population?—Yes.

3652. Will you give us briefly your views upon that side of the question?—I think first it is most important to enlighten the young male population about venereal diseases. I think this could be done by lectures, illustrated possibly by Kinemacolor photographs, by selected medical men at all large factories. All large employers should be consulted, I think, to see if you could arrange for lectures. I am sure many cases are contracted through ignorance of the grave dangers of the diseases or even of their existence. With regard to these lectures, possibly some such arrangement could be made by lady doctors for girls. I could arrange a demonstration of these Kinemacolor photographs if the Commission care to see them.

3653. I do not know whether the members of the Commission would like it; but it seems to me it would be very useful if we could get some idea of what can be done from the point of view of education with the Kinemacolor photographs. Perhaps you could try and arrange that?—Yes, I could arrange it.

3654. You would combine these lectures and illustrations, and you would also impress upon the public the importance of early medical advice?—Yes.

3655. At what age do you think such instruction should be given?—I should think at school it would be too early.

3656. Do you think about 16 or 17?—16 or 17, I should think. I think all employers should, and I think they would probably be only too glad to have some medical man going round to give lectures. It would reduce disease a great deal.

3657. And you think if this education were systematically carried out, it would have the effect at all events of causing anybody infected to take medical advice at once?—Yes, I think so. That is the effect it has had upon most of the troops in the London district.

3658. Of course, amongst your soldiers you have every advantage: you can keep them under constant observation, and you have got them under military discipline?—Yes.

3659. I understand you do not think that any form of compulsory notification among the civil population is desirable?—It is most undesirable, I think. It leads to concealment of the disease.

3660. Concealment is pretty marked already, is it not?—Yes, and compulsory notification is certainly to be avoided.

3661. You feel sure that that would lead to further concealment, exceeding even that which we know occurs at the present time?—Yes, I think so.

3662. Do you think that treatment should be given free to the poorer classes?—Yes, I think so most certainly.

3663. What general administrative arrangements do you think should be provided to give that necessary medical treatment?—Firstly, you must arrange institutes for the examination, free, of specimens from sores to see if it is a case of syphilis, and of the blood.

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3664. They should be public institutions?—Yes.

3665. And they should be provided at such centres as to be able conveniently to meet all possible demands?—Yes; and I would not give the name and address of the patient to the institution. I would let the practitioner give it a number, so that there would be no notification.

3666. Then you think that all general hospitals should provide a certain number of beds?—Yes. They should take in all cases for salvarsan, and also whilst contagious.

3667. And that they should not be more segregated than is absolutely necessary?—No.

3668. Then as to workhouse infirmaries, they ought to be rendered capable of giving treatment?—Yes, I think they should.

3669. Then I think you feel strongly that more special medical education is necessary if we are to tackle these diseases in earnest?—Yes.

3670. What instructions are given to the officers of your corps?—I will give you a syllabus of the instruction which we give to them. All officers joining the Army, also before promotion to the rank of major, are sent to the Military Hospital at Rochester Row for instruction.

3671. Having got that instruction, are they capable of doing all that is required of them at that period in their service?—Yes, at that period. They are not taught to administer salvarsan. That is a special training. We teach them how to take specimens of blood to send to a specialist for the Wassermann test, and how to take a specimen from a sore to send to a specialist for examination for the spirochæta pallida, and general routine treatment.

3672. And I suppose all young doctors on the civil side of the profession ought at least to have this knowledge?—Yes.

3673. And it is almost essential for panel doctors under the Insurance Act to possess this knowledge?—Yes.

3674. Therefore, one of the things that should be urged is the improvement of medical training with the special object of treating these diseases?—Yes.

3675. I see you draw attention to the feeling of shame and disgrace which you find attaches to venereal diseases. Do you think that sense of disgrace will disappear if venereal diseases came to be regarded as ordinary complaints?—No, I do not think so.

3676. The probability is if more were known about these diseases the sense of shame and disgrace would become greater?—Yes, I think it would.

3677. Do soldiers have much recourse to quacks and quack medicines?—I do not think so. I think all men in the London district come to Rochester Row at once.

3678. Have you got any suggestions to make as to checking the large system of quacking which seems to go on in the country?—Except that at these lectures you could let the public know the importance of getting proper treatment—going to a medical man instead of to a chemist.

3679. Given proper treatment universally provided, the quack should be checked?—Yes.

3680. Now, turning to gonorrhœa, we have all been impressed, I think, by the serious effects of this disease, and I understand you think they are very serious?—Yes, they are very serious.

3681. In the statistics of the Army, gonorrhœa shows very little decline, I think, or at all events less decline certainly than syphilis?—I think it shows less decline than syphilis.

3682. Do you think that shows the general prevalence of gonorrhœa has been maintained?—Yes.

3683. Do you deal with many cases of this disease at Rochester Row?—Yes, we generally have 25 to 30 in hospital.

3684. Is gonorrhœa in the early stages quite easily diagnosed?—Quite easily.

3685. But if the gonococci become latent there is no test which is comparable to the Wassermann reaction for discovering them?—No.

3686. But if the disease is latent, it may still be transmitted?—Yes.

3687. When the disease is in the active stages in a man, can he go on promiscuously transmitting the disease?—Yes, he can go on transmitting disease.

3688. Without any check from the disease itself?—Yes.

3689. And when the disease is in an active stage, must the subject know perfectly well that he has got it?—Yes, he must know it.

3690. But on the other hand he might believe himself to be cured and he might be still capable of infecting his wife and children?—Yes.

3691. I suppose you have reduced the treatment of gonorrhœa at Rochester Row to a regular system?—Yes.

3692. Do you find many relapses?—A certain number.

3693. But as a rule the treatment you have adopted is entirely successful if it is taken early?—Yes, it is.

3694. All that you have told us about dealing with syphilis by teaching the civil population would apply with quite equal force to teaching as regards gonorrhœa?—Yes.

3695. Could you give us a table similar to Table 3 for gonorrhœa showing relapses, days in hospital and time lost during treatment?—I have not prepared such a table. We are doing research work now with regard to gonorrhœa, during which the length of stay in hospital is possibly longer than usual.

3696. Does your hospital ever have to treat the wives or the children of soldiers?—No.

3697. Where do the wives and children of soldiers go to?—They go to family hospitals, the Hospital for Women and Children; there is no family hospital in London. I think they have an arrangement with St. Thomas's.

3698. Now, would you like to make a few remarks upon chancre, about which you have not told us anything yet. How do you now treat chancre when you find it?—I think I told you about diagnosis. We keep the man under observation for two months. We keep a venereal sore case sheet for each patient. (*Handing round the same.*)

3699. In this case of chancre the Wassermann reaction gave a negative result on the first occasion?—Yes, that is on admission.

3700. Then later, not long afterwards, it gives a strongly positive reaction?—Yes.

3701. In that case you diagnose it as syphilis?—Yes.

3702. If not, it would be treated as chancre?—Yes, soft chancre. No spirochætes were found on the first examination; the Wassermann test was negative, we kept the man in hospital till the sore had healed; at the end of the first month we tested his blood again, and it was positive. That was a case of syphilis. If it had been negative at the end of the second and he had shown no signs of syphilis it would have been soft chancre.

3703. But soft chancre is communicable like any other venereal disease?—Yes.

3704. Although if it is not syphilitic, it is much less serious?—Yes, it is a local disease.

3705. You have handed in a memorandum of instructions for the diagnosis and treatment of diseases which is issued as a War Office paper. I suppose that that represents the present practice at all the military hospitals under the War Office?—Yes, in the United Kingdom.

3706. (*Rev. Scott Lidgett.*) There are one or two points I would like to clear up, which are probably due to my ignorance. You spoke just now of driving the spirochætes away as the result of antiseptics; does that mean driving them out or driving them in?—Driving them in.

3707. Then are antiseptics harmful in the first stage?—No; but the spirochæte does not like any antiseptic. It does not then remain on the surface of the sore; it goes to the depths of the tissues.

3708. Is there not more difficulty in dealing with it when it gets buried in the tissues than when it is superficial?—Yes.

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3709. So is it not possible that the use of antiseptics is more likely to result in those ultimate brain and other diseases which only develop later on?—No, not at all.

3710. I suppose, however, a final conclusion upon that question has hardly been reached perhaps in the strictly scientific way?—As to the use of antiseptics?

3711. Yes?—The use of antiseptics only drives the spirochæte from the surface. It does not drive it into the deep tissues, into the connective tissues. Later on in the disease, perhaps three weeks or a month, it gets into any dense tissue where there is a very small blood supply; that is when it is more difficult to cure.

3712. Then you spoke of the infectivity being destroyed in 48 hours by salvarsan treatment. It would be a mistake to suppose that there may not be infectivity so long as the Wassermann reaction exists?—If there is a positive Wassermann, do you mean?

3713. Yes, the patient is infective?—Yes, I should say he was.

3714. That is likely to exist very much longer than 48 hours, is it not?—You will get a negative Wassermann perhaps for two months after treatment.

3715. And is there then a return of infectivity?—I should consider the patient infective. I mean to say, if a man married with a positive Wassermann he is likely to convey the disease to his children.

3716. Have you been able yet to form any opinion as to whether salvarsan is likely to prove a permanent remedy, or whether the spirochætes may eventually, at least in some proportion, adjust themselves to it?—Whether the spirochæte may be acclimatised to it?

3717. Yes?—No, it does not become acclimatised to it, because if you get a relapse and treat a man with salvarsan, it acts just as well.

3718. You think medical experience is now sufficient to say that the spirochæte will not be able to acclimatise itself?—Yes.

3719. Have you formed any real conclusion as to the reasons why syphilis is less prevalent than it used to be?—No, I have not. It may be there is an acquired immunity. It is very difficult to explain.

3720. Passing to the question of lectures you say that in all the lectures given in the London command, continence is strongly advised?—Yes.

3721. Have you any knowledge whether that is universal in such lectures throughout the Army?—I am not sure, but I know in India we used to do it. I have heard other officers make a point of it.

3722. That is to say, continence is always strongly insisted upon?—I cannot say it always is, but where I have been it is. I have heard officers talking to groups of soldiers in barracks on that particular subject.

3723. We may assume that in no case, according to your experience, is incontinence treated as a necessary evil?—In no case; just the reverse. We always make a point of that.

3724. You spoke of the Cantonment Acts being worked in different ways in the different cantonments. Are there no general regulations laid down by the Government in India or by the Commander-in-Chief?—The Cantonment Acts, I daresay, may be read differently in different stations. I do not know.

3725. But are there no general regulations issued from headquarters?—The Cantonment Act is issued from headquarters.

3726. Then how is it that the varying practice is to be accounted for?—I am not sure whether it does very much. I simply say it may, because I have heard medical officers attribute much of the decrease to the Cantonment Acts, and if there is a decrease due to the Cantonment Acts, well, they must have read it in a different way.

3727. If there are varieties in administration, would you take that as partly due to the old tradition under the previous C.D. system still lingering?—No, I do not think so.

3728. (Chairman.) What really happens is simply that in some cases the powers which the Act enables you to enforce are not so much enforced?—Yes. I think

that is what it amounts to. You cannot alter the Cantonment Act.

3729. You cannot exceed such powers as the Cantonment Act gives; but you may and perhaps do relax in some cases?—Yes; that is what I mean.

3730. (Rev. Scott Lidgett.) I may take it, that in the lectures you recommend for the civil population, you would strongly insist upon the hygienic advantages of continence for every reason?—Yes, I would.

3731. Would you include the education authorities in their evening schools and institutes as a suitable channel for this information?—I have no experience of evening schools. How old are the pupils?

3732. From 14 or 15 to anything?—I have no experience of evening schools.

3733. You would not suggest then that it would be for the education authorities to give lectures at suitable times and places in connection with their evening work?—I would bring it home to the young men and young women of the country at every opportunity.

3734. I suppose in all this improvement in the Army the Medical Department has had the active assistance of the chaplains?—Yes, they always work together.

3735. Do you consider that that co-operation is specially valuable?—It is very valuable.

3736. I may take it that you would lay great stress upon moral influence and educational influence as well as upon the mere treatment of hygienic principles and the perils of incontinence?—Yes. At the Rochester Row Military Hospital the chaplain and I work together with the greatest success from that point of view.

(Sir D. Brynmor Jones.) I have no questions to ask.

3737. (Sir Kenelm Digby.) I should just like to get on the notes this last sentence in these instructions. "If you wish to marry there is no reason why you should not do so after a proper interval; but before you arrange to do so, you should consult your medical officer who will advise you exactly as to how long it will be before you can safely marry. If you marry before the time fixed by him, you may convey the disease to your wife and children?"—Yes.

3738. Have you had occasion to act upon that?—Yes; occasionally a man in the Guards comes to me and says: "Am I all right, sir? Do you think it is safe for me to marry?" Then we go into his case very carefully and advise him.

3739. Could you give us some idea as to how you would practically carry this out; as to what would be the conditions which would justify you in telling a man that he may reasonably and safely marry?—In a case of syphilis the man who has completed his course of treatment should have been free from symptoms for two years after completion of treatment, and at the end of that time should give a negative blood result, and then we give him a provocative injection of salvarsan, a small injection, sufficient to provoke to activity any spirochætes which remain. We test his blood at the end of 24 hours, 7 days and 14 days, and if he is still negative we say: "As far as known you are cured."

3740. You think that gives you a reasonable degree of safety?—Yes, it is a severe test.

3741. There must be two years' interval, at least?—Yes so I think.

3742. I suppose these new discoveries have not really been known long enough for you to be able to speak with any very great confidence?—No; but as far as one knows, I think that is a good test.

3743. Of course, you have in the Army exceptional advantages; you can get hold of the man at once and you can follow him through all the stages and observe the disease, and you have opportunities for observing his condition in a way which an ordinary civilian doctor has not?—Yes.

3744. Or, at all events, to anything like the same degree. Do you think that if you could at all make far more general than it is now the knowledge of the dangers of these diseases you could apply a somewhat similar mode of proceeding in ordinary civil life?—Yes, I think so. I think it is most important to let the public know about it, and also to know the importance of seeking medical advice early.

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3745. That is the first point: get the man to the doctor at once?—Yes.

3746. Then I understand you are against compulsory notification; you think that would have a deterrent effect, do you not?—Yes, I think it would.

3747. You believe that if these tests could be applied to the civil population, it might be done with great advantage if only on the question of marriage?—Yes, I think so.

3748. (*Sir Almeric FitzRoy.*) In this syphilis case sheet I observe you use the term "treponema pallidum." Is that the same as spirochæta pallida?—Yes.

3749. What is the use of varying the terminology? Why do not you use the same term for the same disease?—In the new syphilis case sheet (I can give you a copy in a few days) you will find it is spirochæta pallida.

3750. Yes?—It was corrected the other day, but it is generally known among medical men as "treponema pallidum also."

3751. Yes, I know; but is it not useful to employ the same term always for the same disease?—At Rochester Row we often speak of "treponema pallidum."

3752. As to gonorrhœa, is there any means of diagnosing and detecting the presence of gonococcus after the discharge has ceased?—Yes, prostatic massage; we always adopt that at Rochester Row.

3753. Is that efficacious?—Yes.

3754. Does it ever fail?—I cannot say it never fails, but if the gonococcus is there the probabilities are that we will be able to massage it out.

3755. You bring it to the surface?—Yes.

3756. You bring it to light?—Yes. It is our test as the standard of cure now. We always massage the prostate.

3757. I observe here you state that among 3,000 intravenous injections of salvarsan, you have had no fatality. How do the ideas that were mentioned by Lord Sydenham as to the dangerous character of salvarsan get about?—There have been deaths from salvarsan.

3758. But then people do not generalise from one or two instances, do they? From what Lord Sydenham quoted, it was rather a severe indictment upon the use of the drug?—Yes, I do not know where he derives his information from. I know exactly what deaths there have been.

(*Chairman.*) Let me read you this.—Dr. Dreuw, of Berlin, states in a letter to the "Lancet". "Since the introduction of salvarsan three and a half years have passed. In the meantime a large number of deaths (about 200) and of cases of blindness, deafness, "encephalitis hæmorrhagica, paralysis, epileptiform convulsions, and grave poisoning after the employment of salvarsan have been recorded in medical literature."

3759. (*Sir Almeric FitzRoy.*) Is that *post hoc* or *propter hoc*?—It is not my experience of the drug.

3760. You think a good deal of carelessness in the administration of the drug must have been employed in these cases?—It is due to faulty technique as a rule.

3761. It does require very high skill?—It requires great care. You must give attention to every detail.

3762. Your experience points to the immense value of early diagnosis and prompt treatment?—Yes.

3763. And your only plan of applying these methods to the civil population is by lectures, I understand?—The only way to get people to report sick early is to let them know the importance of it.

3764. Would not the distribution of leaflets be more efficacious?—I think if you could show them photographs, they would realise more fully the dangers of the disease.

3765. You can give many lectures, but you cannot compel people to attend them?—But you cannot compel people to read.

3766. If they have the leaflet in their hands, it is possible at their leisure their curiosity might at any moment lead them to study it?—Yes, that would be one way of educating the public.

3767. You condemn notification altogether on the ground that it would lead to concealment?—Yes, I think so.

3768. But supposing concealment is made subject to heavy penalties, what should you say then of the efficacy of notification or the possible efficacy of notification? They might prefer it to the greater evil of running the risks of incurring the penalty of concealment?—Yes, they might.

3769. You must consider everything in connection with notification before you condemn it; you must consider all the means by which it might be fortified?—If you have notification you will have more people going to quacks and avoiding doctors.

3770. But could you not penalise the practice of quacks too?—Yes, but that is not for me to say.

3771. There are all these expedients you might adopt to fortify the practice of notification?—Yes.

3772. You admit that?—Yes.

3773. (*Mrs. Creighton.*) With regard to the dangerous results of salvarsan, do not you think a great many of these cases may have come from the publicity given to it as being a cure and its being used by an unqualified person?—It is chiefly due to faulty technique and being given to patients who were not suitable for it.

3774. You would say these evil results are due to that?—Yes.

3775. Then in your description to Lord Sydenham of your methods of treatment, you said that the sore would be healed in eight days and the patient made non-infective. If that is the case, why is the treatment continued?—Because it does not follow that because the sore is healed a man is free from the disease and has no local infective conditions; probably some spirochætes remain in the system which further treatment is necessary to destroy.

3776. I think to the last questioner but one you described generally what you meant by a cure. After two years if a man gave a negative reaction you would consider him cured?—By cured, I mean in primary cases the man should be free from symptoms for one year from completion of treatment. During that time he should show quarterly negative blood results. In secondary cases he should be free from symptoms for two years, during the first year of which he should show quarterly negative blood results and during the second year half yearly.

3777. So that in a primary case, the cure might be complete in one year?—Yes.

3778. And you would allow a man under those circumstances to marry?—I would give a provocative injection before deciding.

3779. Then one question, just for information, about the soft chancre. If it is neglected, does it develop into something worse?—No, not into syphilis.

3780. It does not?—No.

3781. It is quite a separate disease?—Yes.

3782. So that it simply means the actual soft chancre gets worse and harder to cure?—Yes.

3783. And the man is infectious all the time?—Yes.

3784. But he can infect with nothing but soft chancre?—Yes.

3785. Then would you approve of powers of compulsory detention being given to the men who are not cured when the time for their discharge came? I mean if a man was in hospital at the time his discharge came and he wished to go?—You mean in the Army.

3786. Yes?—Would I approve of his compulsory detention?

3787. Yes?—I think it might be very hard on a man, because he might have got some civil employment waiting for him, and he could continue his treatment in civil life.

3788. But, of course, you would give him full instructions as to how to continue his treatment?—Yes.

3789. Then you said that a good many of the young recruits came up quite ignorant about this disease?—Yes.

3790. How soon does a recruit on joining have an opportunity of hearing a lecture and being instructed?

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—I believe the lectures at the London Dépôt at Caterham are given every six months. I cannot tell you without inquiring from the dépôt.

3791. Then there is no definite arrangement to ensure that as soon as a young recruit joins the Army he is at once warned on these subjects?—I do not think he is at once.

3792. But ought not he to be at once warned?—Yes, it would be better.

3793. Because, I suppose, a great many young recruits come from the country?—Yes.

3794. You were speaking about large employers being willing to organise lectures. The plough boy, the country lad, could not have any chance of hearing the lectures?—No.

3795. Therefore, it seems imperative that such instruction should be given at the moment of joining the Army?—I am not sure how frequently instruction is given. It may be given immediately on joining. I am not in a position now to know.

3796. You see no way of suggesting how this instruction could be disseminated amongst the country lads as long as they are in the country?—No.

3797. You can suggest no means?—No, there are no means.

3798. Then with regard to the Cantonment Acts, you said that if the man could point out the woman who had infected him she would be offered treatment?—Yes.

3799. Where are such women offered treatment?—At the Cantonment Hospital.

3800. There is a Cantonment Hospital for women?—Yes.

3801. Would that be only for this disease?—No, for all diseases, amongst others venereal.

3802. Are there a large number of women under treatment in such hospitals?—There are always a few.

3803. And is there any power of detaining them until they are cured?—No; it is entirely voluntary; but if they refuse treatment and are found to be suffering from an infectious disease, the cantonment magistrate then has power to send them out of the cantonment.

3804. He can send them away?—Yes; but I have never seen any necessity for it.

3805. (*Chairman.*) That is the penalty; that they cannot reside any longer in the cantonment area?—Yes.

3806. (*Rev. Scott Lidgett.*) With infectious disease?—Yes, any infectious disease.

3807. It is treated like any other disease?—Yes.

3808. (*Mrs. Creighton.*) Is there any attempt made to influence these women morally whilst they are in hospital?—No, I do not think so.

3809. They are simply there for the treatment of the disease?—Yes, they are treated.

3810. If you find a married soldier with a disease, do you take any steps to see that his wife is cured if she has been infected?—Yes, she is treated.

3811. Always?—Yes.

3812. And the children?—Yes, and the children, too.

3813. How quickly can gonorrhea be cured?—I should say in about 30 or 35 days.

3814. After those days a man would no longer be infective; he would not give infection after that?—I would not like to say. We massage the prostate, and if we find no gonococci on three consecutive days we consider him cured.

3815. And you would tell him he might marry?—No. I should see him again after several months, and do it again, if a man wished to marry.

3816. You would let some months pass?—Yes; I should not go on one examination.

3817. (*Dr. Mott.*) I presume it is your opinion that by intravenous injection of salvarsan when the primary sore appears, the possibility of a generalisation of the specific organisms in the blood is in a great measure averted?—Yes.

3818. Then you continue with five injections of mercury?—Yes.

3819. I quite agree with the treatment. Will you tell us why you think it is necessary to continue with the mercury after you have already given the salvarsan?—Because one has found from experience that one injection of salvarsan is not always sufficient. It does not always kill all the spirochætes. It only kills those which are to be got at through the circulation. Mercury is only given to check those spirochætes which escaped the first dose of salvarsan, because they were locked up outside the circulation. As these are released by the process of natural repair, it is necessary to ensure by mercury that they make no headway before the next dose of salvarsan is given.

3820. Then you would give a dose of salvarsan a week later?—Yes; this may be done, but I prefer to wait a month.

3821. First .4, and then .6. Some people do that?—Yes, but I give .6 for the first dose also, unless there is any reason for special caution.

3822. But I was thinking of the idea of Professor Erlich, who showed that with the trypanosome disease the combination with drugs of arsenic and mercury often had a more beneficial effect than one drug alone?—That is the experience of all of us. We have tried salvarsan in single doses. We have tried two of salvarsan and four of salvarsan, and we find we get better results by combining salvarsan and mercury.

3823. The only case of cure after infection by the trypanosome of sleeping sickness that I find recorded was a man who was treated with atoxyl, then acquired syphilis, and was treated with mercury, and five years afterwards he died of pneumonia; but his brain was perfectly free from disease. So that it is possible there may be something in the double treatment?—Yes.

3824. Then do you practise excision of the sore?—Yes. Because by doing so you remove indurated tissues in the affected area in which the spirochæte has a special tendency to persist.

3825. I ask you that, because you made an exception; that the spirochæte gets into the fibrous tissues, and you do not get at them because the blood does not go to them?—Yes. We excise the chancre, or cauterise it. But if it is in such a situation where this cannot be done we apply 30 per cent. calomel ointment.

3826. I suppose the lymphatic glands are enlarged in most of the cases, are they not?—Yes.

3827. Even when you first see a primary sore?—Yes; and if we find no spirochætes in the sore we can sometimes recover them from the glands.

3828. I was going to ask you that question, whether for diagnosis you sometimes remove the glands?—No; we put a needle in the glands.

3829. You can do it with that?—Yes.

3830. Have you examined the lymphatic glands for modified forms which have been described?—No.

3831. Because some authorities say that these modified forms may resist the action of the drug. If the disease is aborted by this treatment, it is reasonable to suppose that the majority of the cases treated when the sore appears would prevent not merely the secondary skin eruptions, but the infection of important internal organs?—Yes, that is reasonable.

3832. Such as the blood vessels, and the central nervous system?—Yes.

3833. I suppose you have no doubt in your mind, although they do not come under your observation, that dementia paralytica and locomotor ataxy are syphilitic diseases?—No; I have no doubt of that.

3834. Have you observed the spirochætes of dementia paralytica under the microscope on the black ground, and compared them?—I have not compared them. I occasionally get a case of general paralysis, and occasionally locomotor. I have seen good results in the early stages by salvarsan.

3835. You have?—Yes.

3836. And of dementia paralytica too?—I have no experience of this.

3837. Could you account for the fact that you cannot kill the spirochæte by injecting salvarsan in cases of general paralysis?—I cannot account for it.

3838. I had the idea that if it gets into the brain the arsenic will not pass through the choroid plexuses

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and into the cerebro spinal fluid, and so will not attack the organism?—This is my idea also.

3839. Experiments have lately been made with a view of seeing whether the salvarsanised serum will do this. I suppose you have had no experience of that?—No.

3840. But you think it is a useful thing to try?—Yes.

3841. I see they have tried the method I have suggested in Paris. You know that practically all cases of general paralysis give a positive Wassermann reaction in the blood?—Yes.

3842. It has always occurred to me that possibly those cases which, after systematic treatment such as you have mentioned, give a possible Wassermann reaction, might eventually turn out to be cases of general paralysis?—Yes, they may.

3843. Do you think that is a reasonable supposition?—Yes, I think it is possible. There are cases where you get a persistent positive, and I am following up a series of those. We give every case which gives a positive reaction another course of treatment, and then follow the case up. It sometimes recurs again.

3844. I have cases myself, not of dementia paralytica, where I am giving the salvarsan, but without results. You said a man with a positive Wassermann reaction is likely to communicate the disease to his wife and children. I suppose you mean he must be in the early stages, not the late stages?—I would not advise a man in the late stage to marry if he had a positive Wassermann reaction.

3845. Suppose you had a man come to you, and you gave him a dose of salvarsan, and the Wassermann reaction disappeared; would you say "Perhaps you may get married in six months afterwards"?—Yes.

3846. How do you know that a year after the Wassermann it would not come back, after he had married?—I cannot say.

3847. We do not know quite enough about it, do we?—No, we do not.

3848. So that practically what you say is, that even with efficient treatment, making them remain two years is a safe thing to do?—I think it is a good standard.

3849. Before we had this mode of treatment, we used to require four years?—Yes.

3850. But you think now the interval can be reduced to two years?—I think so.

(Dr. Newsholme.) Before marriage, you mean?

3851. (Dr. Mott.) Yes; provided the Wassermann reaction remains negative, and you know he has been systematically treated?—Yes.

3852. As a rule I should say it is very rare, even if a man has not been treated at all, but has shown no signs, that he would communicate the disease to his wife five years after infection?—It depends on whether the spirochæte has become localised, and, if so, where.

3853. And a considerable number of people must be walking about not knowing that they have a positive Wassermann reaction, who are married, and who have healthy children. You would admit that too?—Yes.

3854. So that I think you would rather qualify that statement about the Wassermann reaction meaning that a man must be infective?—Yes; but I would advise him to have treatment.

3855. Certainly; I quite agree with you?—And not to marry as long as he has a positive Wassermann. I would endeavour to get his Wassermann negative.

3856. How long would you wish the treatment to be continued?—I would give him two courses. If it were still positive after one course, I would give him another course; and if it were still positive, then I would probably look upon it as a persistent case.

3857. Supposing it were ten years after infection, it would be rather a question whether the wife would not have become a nurse. I mean to say, he might be going in later for one of these diseases?—Yes.

3858. Then, with regard to the dangers of salvarsan, and the administration of it, it is a question, is it not, rather of whether a man has had the necessary experience or not? The accidents that have occurred have been due to want of experience, and want of

proper care in deciding whether the case is suitable?—Yes.

3859. The cases that I have heard of that have turned out seriously, have been cases in which there have been serious vascular disease of the central nervous system?—Yes.

3860. There you would not advise it?—No.

3861. Would you advise intra-muscular injection of salvarsan in such cases?—I do not think I would.

3862. I do not think you attach much importance to the value of that?—If you give it intra-muscularly, it is apt to become encysted, and you do not know how much is absorbed.

3863. A great many do give this intra-muscular injection?—Yes.

3864. But you do not favour it?—I have had cases. I had one where the patient was given it intra-muscularly, and a year later he came to me with a swelling in the buttock where he had had it. We excised the swelling, and we found a large quantity of arsenic in it. We have had several cases six months afterwards.

3865. Then why do you give the mercury?—Because we know it is absorbed. We have tried it with X-rays.

3866. I merely asked that for the sake of the other members of the Committee. Of course we know it lay absorbed?—Yes.

3867. Then with regard to the relative value of neo salvarsan, and the original salvarsan; which do you use now?—Salvarsan.

3868. In preference?—Yes.

3869. But still there are advantages in the use of the neo-salvarsan, are there not?—It is easier to use.

3870. It is much easier for an inexperienced man to use?—Yes.

3871. He merely has to take it diluted in a syringe, and put it in?—Yes.

3872. In New York they are doing it in very large numbers?—Yes. I went into the question a great deal. I went into it recently with Ehrlich.

3873. He favours the salvarsan?—Yes.

3874. Still, they do get good results with neo-salvarsan?—Yes; I will read to you what Ehrlich said. (*The witness read from the letter, which the shorthand writer was directed not to take.*)

3875. Therefore, in the interests of the nation, and seeing it is so essential, as you have pointed out, that the disease should be diagnosed when the primary sore appears, and that its treatment is likely to be of the greatest value to the nation, is it right that chemists and quacks should be permitted to treat the disease at all?—I do not think it is.

3876. Not in the interests of the public?—No; it is not in the interests of the public.

3877. Because it requires skilled diagnosis and skilled treatment?—Yes. One of my reasons for not giving neo-salvarsan is that at the military hospital at Rochester Row I have medical officers of the Army and of the Indian Medical Service for instruction, all of whom go to tropical climes, and neo-salvarsan is so readily oxidisable at a temperature of over 80° F. that it is not safe to use it in a tropical climate; so I teach the use of the drug which we know is safe. That is one of my chief reasons. As a matter of fact, the last two months I have been using a later preparation than neo-salvarsan. I have been using salvarsan-natrium. I am doing a series of cases with that to see if the results are as good as with salvarsan.

3878. Is there anything in the sterilisation of the water?—Yes, it is necessary to distil the water for injection; but it is of the greatest importance to make the saline solution the morning of the injection.

3879. It should be sterilised?—Yes.

3880. Do you find it necessary to test the urine?—Yes, we always test the urine. In the operating theatre I have a card with the names of the patients for salvarsan, with a column for urine, and we never give the injections until that is filled in.

3881. Then you would not administer it if there were any indications of kidney disease?—I should give a smaller dose.

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3882. I mention that, because you may sometimes have albumen in the urine as an effect of syphilis?—Yes.

3883. And if you treat it the albumen disappears?—Yes.

3884. Then with respect to lectures, you spoke of the Kinemacolor. Have you seen a film of the National Cash Register Company?—Yes, it is that I referred to. There are certain photographs that should be cut out.

3885. Yes, I think it would be desirable, because some of the pictures would be very liable to cause a great deal of mental disturbance in some individuals, and produce a condition of syphilophobia. One meets with that very frequently, and we have to be very careful not to produce that?—Yes, I think there is that danger. But I mentioned it for the purposes of the members of the Commission.

3886. Yes; but I was speaking of the interests of the public. In fact, I think if I were a panel doctor I should start lectures in that way to prevent disease, because then one would get paid for every insured patient, and would not have to treat them?—No.

3887. (*Sir John Collie*.) Is it true that syphilis, apart from treatment, tends to wear itself out in time, to a limited extent, at any rate?—I do not think so. One sees cases which had particularly mild symptoms at first, and which later develop general paralysis of the insane, or locomotor ataxy.

3888. I was thinking more of the virulence of the disease, apart from the treatment. I do not mean for a moment to suggest that proper treatment of the disease is not of the utmost importance, but I wanted to ask your view as to whether or not the disease did in time, apart altogether from treatment, as time wore on, gradually reduce itself?—That is my experience; that it is mild cases which appear at first to have worn themselves out, which develop these nerve symptoms later on in life.

3889. With regard to the statistics that were read out of the number of deaths from salvarsan, I suppose you will agree that a large number of those are probably brought about by the fact that the drug was used in improper cases?—Yes.

3890. In the advanced stages perhaps of G.P.I. or locomotor ataxy?—Yes, and by persons who did not know how to use the drug.

3891. I was coming to that. They are also very largely from maladministration?—Yes.

3892. In short you would agree, I think, that 3,000 cases without a death in the case of special treatment of this sort is really sufficient evidence that if properly performed and suitable cases are chosen it is practically harmless?—I think so. I give it every day. I gave six this morning. We give it as a part of the morning's work, and never see any bad results beyond possibly a little fever, or a little vomiting or diarrhoea.

3893. Then on these statistics there is this other point, that with the newer methods which have been developed recently, and errors in technique have been discovered, and the method is now much more perfect than it was a few years ago?—Yes.

3894. What is your provocative dose of salvarsan?—2 of a gramme.

3895. Is there any disease that you know, or is known to the medical profession, which approaches syphilis in the amount of economic disaster which follows directly in its train?—No.

3896. Is it distinctly curable, provided energetic measures are adopted?—I think it is curable.

3897. With regard to medical education, are you satisfied with the way in which our young medical men are being turned out?—No.

3898. Do you think a great deal requires to be done in the different schools?—I think in all schools of medicine there should be special training now in the subject. It is many years since I was at a school of medicine. Perhaps there may be a member of the staff of a medical school here.

3899. Do you think there is much difference in the training, compared to what it was say 30 years ago?—I should say not, judging by the medical

officers who join the Army. We find it necessary to put them through a course of instruction.

3900. As a matter of fact, you find that their knowledge is so defective that you have to give them a special course of instruction?—Yes, in that particular subject.

3901. I know that was so 30 years ago, and it is still. I want to ask you now about the older method of treating syphilis by swallowing medicine. Do you find it is much more satisfactory in the service, and would it be much more satisfactory for the civil population too if treatment by salvarsan and mercury injection were adopted the results would, I take it, be much better than trusting a man of that class to take medicine?—Very much. You cannot depend upon a man to take medicine; but if you give him an injection, you know he has got it.

3902. Your suggestion as to the reorganisation of the out-patients' department where every facility for early diagnosis and treatment would be available, if I may say so, is very excellent. But I take it, I may assume, that you mean that where hospitals are not in convenient centres some such arrangement as dispensaries or institutions would be contemplated?—Yes, I assume those.

3903. It would never do to trust to the hospitals as they are?—No.

3904. And I take it these institutions could be linked up with some method of early diagnosis besides treatment, so as to have an early diagnosis of these complaints?—Yes, that could be done at institutions.

3905. I take it from what you have said, you consider that the opportunities for adequate diagnosis and treatment of venereal diseases is wholly inadequate in the civil population both in London and the country?—Yes, quite inadequate.

3906. Is there any disease you know that is more contagious than syphilis in its early stages?—Not more contagious.

3907. Or gonorrhœa?—Gonorrhœa is as contagious.

3908. Or even soft chancre?—Yes, or soft chancre.

3909. I note you say that salvarsan or neo-salvarsan renders the patient non-infective in 24 to 48 hours. Do you consider, therefore, that the early treatment by this method is bound to have a very widespread effect upon diminishing the amount of syphilis?—It must have.

3910. Would it be correct to say that experimental investigations by competent observers prove that 50 per cent. of latent cases of syphilis which otherwise would not be recognised would be recognised by the Wassermann test?—Yes, I should say 50 per cent.

3911. Do you think the public generally appreciate the possibilities of innocent or non-venereal infection of syphilis and gonorrhœa?—I do not think they do.

3914. Do you think it is a great deal more prevalent than most people appreciate? I refer to cases, for instance, of infection by forceps, knives, forks, cups and so forth?—I have seen similar cases. I have seen it in a man who shared a mug of beer in a canteen. He had a chancre on the lip. I also saw a police constable not long ago with a chancre on one of his fingers.

3913. Somebody had bitten his hand, I suppose?—Yes. Then I saw a doctor from the north who had a local infection in the nose from examining a child's throat, and the child coughed in his face. There are frequent cases.

3914. Do you have to treat medical men when they are infected?—Yes, some come to me.

3915. So that you have experience of innocent infection?—Yes, I have a good deal.

3916. Do you think it is likely to be an exaggeration if the late Sir Jonathan Hutchinson is reported to have said he attended as many as ten doctors a year for innocent infection of syphilis?—I should think it is quite possible. I attended several last year.

3917. As a matter of fact Sir Jonathan did say so. Then I take it if there are so many medical men being infected in that way, the proportion of nurses and women who attend these unfortunate people is probably larger?—Yes.

3918. For instance, midwives?—Yes.

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3919. I note that you speak of the importance of educating a medical man to look with suspicion on every venereal sore, no matter how trifling it is?—Yes.

3920. Do you think if that knowledge reached the public in the way you have been suggesting, and if our medical men were taught to appreciate the vast importance of discovering the early symptoms of these diseases and treating them early, that alone would very much diminish the prevalence of syphilis?—Yes, it would, very much.

3921. Is hereditary syphilis always recognisable?—No, I do not think it is; may be latent till puberty or later.

3922. You state that you have had very few cases of hereditary syphilis, but I suppose that would be explained by the fact that all your recruits are thoroughly examined and any hereditary cases would be rejected?—Yes. I saw a case of interstitial keratitis the other day in a young soldier; but they are medically examined before they join the service.

3923. There is one excellent result given in your statistics; that is, that as many primary as secondary cases now present themselves as compared with formerly one primary and five secondary?—Yes.

3924. Do you think there is a reasonable prospect, if the measures for the instruction of the soldiers were carried out in civil life, that something like the same proportion might obtain in the civil population?—I think it is quite possible.

3925. And if that were so it must mean a vast and very rapid diminution of the amount of syphilis prevalent?—Yes.

3926. With regard to the statement that patients who come for treatment see the severe forms of the disease in others attending for treatment; and, therefore, there is no occasion to believe that syphilis will be less dreaded because now more easily treated and more rapidly cured; am I right in saying that this condition of things would also apply to the civil population?—Yes, the same thing exactly would apply.

3927. Because they would be under exactly the same circumstances in hospitals?—Yes. Under the same circumstances the same would apply.

3928. You see the importance of what I am putting?—Yes. I will show you some photographs when you have finished. It is cases like those.

3929. Might we have them now?—Yes; there is a photograph of a man who had been treated with mercury for nine months. The mercury failed and he was sent to Rochester Row to be treated. In 10 days this was the result. (*Showing photograph to the Commission.*) It shows the rapid effect of salvarsan.

(*Dr. Mott.*) May I ask one or two questions that I omitted, my Lord?

(*Chairman.*) Yes.

3930. (*Dr. Mott.*) I should like to ask you whether it is of very great importance to standardise the Wassermann reaction. I mean to say, the method you have given and the method they have admitted at Rochester Row is the method that Professor Wassermann uses in Berlin, and I think statistics with regard to the Wassermann reaction are very likely to be erroneous unless one follows that method. I think if the Commission were to lay it down that the evidence to be given should be based upon the original Wassermann reaction we should come to more correct conclusions. Would you agree with that?—Yes, I thoroughly agree with that. I think it is a matter of some importance. I think if you ask Major Harrison, the Pathologist to the Military Hospital at Rochester Row, he will agree on that. It is a matter of great importance that the original test should be done throughout and not modifications.

3931. (*Chairman.*) That means you must look with suspicion on results where it cannot be shown that the original Wassermann has been carried out?—Where the principle of the original has not been carried out, I look with suspicion on them.

3932. (*Sir John Collie.*) Do you agree with the experience of the continental authorities that voluntary submission to treatment, where facilities are sufficiently

adequate, is more likely to diminish the diseases than compulsory notification and detention?—Yes, it is; much.

3933. Do you think the establishment of public laboratories to which panel and other general practitioners could send specimens of what they thought might be infective material taken from suspicious cases and showing the early treatment of cases which, if unrecognised and, therefore, untreated, would cause the spread of gonorrhœa, syphilis, and soft chancre and, therefore, aid towards the immediate verification of a suspicious case, would have a vast effect?—Yes, a great effect. To show the way in which you can take a specimen from a chancre and put it up and send it by post to the specialists at the institute, or take a specimen of blood, we will demonstrate to you at Rochester Row if you care to come.

3934. (*Chairman.*) We shall be very pleased—we will show you the spirochæte, and show you how specimens can be put up and sent by post.

3935. (*Sir John Collie.*) I suppose anyone with almost elementary knowledge could do this in three or four minutes?—Yes.

3936. In about as short a time as he would take to vaccinate a child, or perhaps less?—Yes.

3937. And the operation is not really more difficult?—No.

3938. Will you tell us what you think would be the effect of notification with regard to the possible concealment of disease?—I think it would certainly lead to concealment.

3939. Do you think a patient is likely to run the risk of being punished by an Act of Parliament for concealing a disease of that sort? Do you think it is more likely he would run the risk than be terrified by it?—I think some people would run the risk.

3940. Hitherto our attention has been very largely directed to syphilis. I would just like a word or two about gonorrhœa. I think you did tell us that the effect upon national health was very serious?—Yes.

3941. Would you mind, for the benefit of the non-medical members of the Commission, telling us in what way gonorrhœa is so serious?—A common cause of stricture is gonorrhœa, and gonorrhœal rheumatism is a most serious affection. Many people are crippled with gonorrhœal rheumatism. Then a large amount of sterility is due to gonorrhœa, due to the infection of women. It affects every part of the body.

3942. Then blindness in infants, what is called ophthalmia neonatorum?—Yes; blindness in infants is very largely due to it.

3943. Then many of these uterine diseases, such as vulvitis and pyosalpinx, are produced by gonorrhœa?—Yes, and interstitial keratitis of the eyes—blindness in young people.

3944. Would it be any great exaggeration to say that many cases of gonorrhœa are nearly as serious as syphilis now that you have new methods of treatment?—I think they are.

3945. (*Mrs. Creighton.*) The treatment of gonorrhœa has not improved in the same way as the treatment of syphilis?—No, it has not. We are investigating the subject very thoroughly at Rochester Row now.

3946. (*Sir John Collie.*) Is it a fair inference that syphilis is the cause of general paralysis of the insane and locomotor ataxy, judging from the fact that Noguchi, Mott, and others have found the spirochæte on post-mortem in the centres of the nervous system?—Yes, it is the cause.

3947. I think you have told us that the mild cases of syphilis very often terminate in these cases later on in life?—That is my experience. It is the mild cases which are apt to do so, but the number which develop these diseases is small.

3948. (*Canon Horsley.*) Going back to this card, may I ask when it was first issued? How old is it?—I do not remember, but I should say it has been out about 8 or 10 years.

3949. Do you have a similar card for people suffering from gonorrhœa?—Yes, we have.

3950. But would it not be possible to have on these cards a little bit of advice as to avoiding forni-

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[Continued.]

cation. You tell them to avoid spiced food. Surely it is more important to tell them to avoid fornication?—Yes, I think it would be possible.

3951. You think it might very well go on?—Yes, we are revising the card now.

3952. With regard to the recruits, would it be possible to take the blood of every recruit?—Yes, quite possible.

3953. And that would touch the whole section of the community and diffuse knowledge?—Yes, it would.

3954. Could not you also take the blood of at any rate every convicted prisoner?—Yes; we could take specimens of the blood.

3955. And that would touch another class?—Yes.

3956. It seems to me we would get information from all those who have to surrender their liberty to a certain extent?—Yes.

3957. Also with regard to recruits, you are probably aware there used to be in the Army some horrible old soldiers who always used to teach evil to the recruits?—Yes.

3958. And tell them what a man and a soldier should do?—Yes.

3959. I do not know whether that exists now, but it did. That would show the desirability of giving the recruit the information at once?—Yes.

3960. Again, I gathered with regard to these lectures given by the doctors, there is no stated period for them?—I do not think there is; but I am not sure, as I am not in the way of knowing.

3961. At any rate, it is not given directly. It is not one of the first things to tell them about the dangers?—No; but I believe an early opportunity is generally taken.

3962. A recruit may go six months before he hears a lecture at all?—I am not sure of that.

3963. Is it not also left a great deal to the personal equation of the doctors as to whether they teach them to abstain from evil or not?—Yes.

3964. Some doctors might make a great point of it, and some doctors might ignore it altogether?—Exactly.

3965. Is not that rather a pity? Should not the doctors be instructed that they should do that at all the lectures?—Yes. I think most do, but it is left to the doctor.

3966. With regard to your figures, or any figures about the Army, like all we have had they are a little under the mark. The real state of affairs is a little worse than the figures show us?—Yes.

3967. You do not get all the soldiers in London, for example?—I think we do.

3968. I think not. I have a letter here from a doctor with a very large practice, whom I know very well. He is writing on another point, but as to the amount of syphilis, incidentally he says: "It is remarkable how little syphilis I get. What I do get is mostly army men who come to me specially." This is a London doctor, and these are London soldiers?—Is it soldiers that he is speaking of?

3969. Yes. He says: "Army men who come to me specially." He is a south London doctor, and I know he has these men; and I can quite imagine a great many men in the Army do not want the Army doctors to know what is the matter with them?—No.

3970. We want to get at facts. All the figures we have had are under the mark, from whoever they come, and I want to point out that these are under the mark as well, and that a great many may have it without going to you?—Yes.

3971. (Chairman.) I take it that that number must be very slight?—Yes.

3972. And I take it a soldier could not have the disease for any length of time without coming into your statistics?—No; he is medically inspected fairly frequently, and if he had symptoms, unless they were local symptoms, they would be noticed.

3973. So that I do not think we need take it there is anything material in the nature of understatement in your figures?—No.

3974. (Canon Horsley.) But some do escape your net?—Yes.

3975. Then in the case of patients who are detained in hospital who are poor people, that would necessitate some document being given to the employer as to why they are absent from work?—Yes.

3976. In that case would it state accurately what is the matter with them?—Yes.

3977. You say here, "The patient is detained at the hospital"?—Yes.

3978. The employer would want to know why he is not at work?—Yes.

3979. And he has to produce his medical certificate?—Yes.

3980. What if that said "in the hospital being treated for syphilis," there might be complications with the employer, you see?—Yes.

3981. That is rather an important point?—Yes.

3982. We should all like to see them detained, but there is that great consideration that comes in as to what would be the industrial result of the detention?—I think they would have to be detained, because after salvarsan you are liable to get a little fever.

3983. We must face that little difficulty. You have no doubt that the fact of some men in the Army being allowed to marry tends to reduce the amount of disease?—It does.

3984. Do not you think it would have the same effect in the Navy?—Yes, it would.

3985. As far as you have heard, is there any reason why Navy men have never been allowed to marry?—No. I have never gone into that question.

3986. The element of fear is a sovereign force in the world, and the use of salvarsan would tend to diminish the fear of the disease?—Yes.

3987. Is either or both of these diseases the cause of a great deal of pain?—No; there is not much pain.

3988. In neither case?—No.

3989. So that it would not be to escape pain?—No.

3990. At any rate, it would diminish the fear of the disease if they were told it was a shorter time to cure?—Yes.

3991. We are told that in the Army men lose an amount of money if they are diseased?—They lose their proficiency pay.

3992. Do they lose any chance of promotion in any way?—That is a regimental arrangement if they do. I do not think they do. It is not a regulation that they should. All they lose is their proficiency pay.

3993. Therefore, that would act as a deterrent?—Yes.

3994. Does that regulation apply to the officers as well?—It does not; we get no proficiency pay.

3995. All the statistics I have seen vary with regard to the comparative amount of disease in the British Army and the continental armies, but all are very much against the British Army. Have you investigated that point at all?—I have seen that.

3996. And you know that there is much more in the British Army than in the French or German Armies?—I have not gone into the question very thoroughly.

3997. You have seen the statistics, probably?—Yes.

3998. Everyone makes it out very much worse I do not know why. Do you?—No.

3999. Professor Ehrlich, who has been quoted as a very great authority, tells us that 10 per cent. of the spirochæta are resistant to salvarsan. I took that out of one of these books.

4000. Of the spirochæta pallida?—Yes. Do you think that is so?

4001. (Dr. Mott.) I thought possibly the reason why Colonel Gibbard gave mercury was so that those who were resistant to arsenic might be dealt with?—They are not all killed on one injection—only those you get at through the circulation.

4002. (Canon Horsley.) But those 10 per cent. would multiply?—Yes.

4003. And do they multiply quickly?—That we do not know. We do not know their life history.

4004. Salvarsan is a very powerful drug, obviously?—Yes.

4005. And if you put it into my blood, it kills all the spirochæta?—Yes.

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4006. Is it not liable to kill some other and possibly beneficial organisms in my blood?—I do not think so. Evidence from animal experiments shows that it has a special effect only on certain noxious organisms, above all those of syphilis and yaws, and to a slighter extent the parasites of malaria and sleeping sickness.

4007. It must be a most powerful thing?—In nearly every case that you give it, in 10 days or a fortnight the person will say: "I have never felt so well in my life." I have had men gain a pound a day for 14 days, and that sort of thing. It has a most wonderful tonic effect, which, in the case of a depressing disease like syphilis, is of very great importance.

4008. I will take the example of my neighbours. They turn out ferrets to kill rats, and the ferrets also go for the rabbits. Could not salvarsan, while it destroys the spirochæte, also destroy something else that we should like to keep alive?—Yes.

4009. (Chairman.) But your whole experience contradicts that?—Yes, it does.

4010. From the number of men who have passed through your hands with no after effects?—Yes. They have all improved in their general health.

4011. (Sir John Collie.) May I ask one or two more questions? With regard to the treatment of gonorrhœa, do you treat your gonorrhœa cases in bed?—Yes, at first.

4012. And you treat it in bed, because if you did not you would probably have sequelæ?—Yes.

4013. Take those cases referred to by Canon Horsley which are said to be treated for venereal disease outside. These men could not stay in bed in barracks by the order of the general practitioner?—No.

4014. Therefore, they would not be treated in bed?—No.

4015. And are therefore likely to have secondary symptoms, which would come to your knowledge?—Yes.

4016. May we argue from this that a small, almost negligible quantity of men are treated outside?—I do not think many are treated outside.

4017. Now take syphilis. We were told that in the Navy, men actually welcome the Wassermann test when they wanted to be sure whether they had the disease or not?—Yes.

4018. I take it the condition is much the same in the Army?—Yes. Men will come and ask to have their blood tested; that is, men who have not been under treatment. Before salvarsan was officially sanctioned, men would come and offer to pay for it. They were so anxious to get treatment that they would offer payment; but, of course, we gave it free.

4019. So that after all there must be a very very small proportion of men who go to outside doctors?—I think it is small.

(Mrs. Burgwin.) I have no questions to ask.

4020. (Dr. Newsholme.) With regard to the notification of syphilis, I gather you are not in favour of that?—No, I am not.

4021. One of your main reasons for that is, that it might drive patients to be treated by quacks or chemists?—I think so.

4022. We have had it in evidence before, that many doctors are not experienced in the treatment of venereal diseases?—That is so.

4023. And it has been suggested, I believe, in that connection, that they should be placed on the same footing as chemists or quacks. Would you draw a distinction between the two classes of persons?—A medical man would know the disease.

4024. Although he had had no experience of it, he would know the main features of it?—He would know the main features of it and the main lines of treatment, too.

4025. And the dangers from it?—Yes.

4026. But supposing that difficulty were removed, that notification were to be followed by concealment of disease, if, as you suggested, free means for treatment were provided at the expense of the community, would not that do away with one of your chief objections to notification?—I do not think, if it were to be known they had the disease, that people would go sick with it.

4027. Then you represented to us the extreme importance of having specimens sent for the earliest possible diagnosis?—Yes.

4028. When those specimens are sent, you suggest no name or address should be attached?—That is so.

4029. If this is undertaken, as I hope it will be, by public health authorities, it is very desirable that these authorities or their officers should know which are duplicated specimens and which are original specimens. How would you avoid that, in the absence of any statement of the name or address?—Which are duplicated specimens?

4030. I mean, when we had two or three successive specimens from one person?—They would all be given the same number, would not they?

4031. You mean you would instruct the doctors to send in specimens for a given patient under a certain number?—Yes.

4032. Would you also ask for supplementary information without the names?—Yes, he should send some particulars of the case.

4033. Brief particulars of the case?—Yes.

4034. That you distinguish from notification altogether?—Yes.

4035. Would you recommend following up the examination of the specimen on behalf of the public health authority by asking the practitioner for particulars of the future progress of the case, not mentioning any names?—Yes. You would get at accurate results then.

4036. That is done, as you know, with regard to diphtheria and typhoid specimens; whether the doctors have confirmed the diagnosis or not?—Yes.

4037. A similar procedure might be adopted with regard to venereal disease?—Yes.

4038. Then you recommended the free treatment of poorer persons in the community?—Yes.

4039. If the patient comes for treatment he generally has to be entered in some register?—Yes.

4040. Would you recommend the entering of his name and address or not?—At the hospital?

4041. At the hospital?—His name and address would have to be taken.

4042. Is not that a form of indirect notification?—Yes, it is.

4043. If so, he might possibly keep away from the hospital?—Yes.

4044. Although he very likely would not realise that that was a form of notification?—No. I had not thought of that.

4045. But unless you have the name and address of the patient registered, what is to prevent that patient going about from hospital to hospital? He gets his first dose of salvarsan at one hospital, and then perhaps gets a dose improperly at another hospital; so that it appears as though it is quite indispensable that the name and address of the patient should be entered at each hospital?—Yes.

4046. Then, furthermore, if such free treatment is provided in different administrative areas, somebody has to pay for it and that somebody would be the public health authorities?—Yes.

4047. I think you probably know that in the case of tuberculosis half the cost of treatment of tuberculosis is paid by the central authorities through the Local Government Board and half by the local authorities?—Yes.

4048. If you had a similar system with regard to venereal diseases, would it not be necessary to know the name and address of the patient in order to allocate the local expenses?—Yes, it would.

4049. Can you suggest any means by which that allocation of financial arrangements might be made without infringing on the principle you have laid down of not revealing the name and address of the patients?—No. It would require some thought.

4050. I am putting to you a difficulty which I feel myself, and I wanted to get your opinion upon it?—I have not given the matter any thought.

4051. All the same, you would not like any formal, direct notification?—No.

4052. And you would consider it indispensable that any indirect notification coming through patho-

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logical specimens being sent for diagnosis or coming through treatment, or any indirect information of that sort, should be kept absolutely confidential?—It should be treated confidentially.

4053. Then I would like to ask you a question about the relative infectivity of different stages of syphilis. You laid down a rule that syphilis is more or less infective, or ought to be regarded as infective at every stage of the disease?—Yes.

4054. Would you extend that to the tertiary stage?—It is infective in the tertiary stage, but it is chiefly infective in the primary and secondary stages. It is in the early stages that it is infective chiefly.

4055. Another point that was raised was the question of the standardisation of the Wassermann reaction. That I understood to imply keeping to the original Wassermann test?—Yes.

4056. Is it not possible that such a standardisation may mean stereotyping the pathological work?—Yes.

4057. Supposing real improvements in method come about, would you recommend they should be disregarded in order to have uniformity of method?—I think we should have uniformity of method.

4058. But that uniformity might not necessarily be in the present method; it might be uniformity in newer improvement if such a scheme came along?—Yes.

4059. With regard to the question of the transmission of specimens I was greatly interested from a public health point of view, as to the feasibility of transmitting fluid from the primary chancre for examination for spirochæte, at a distance. Can that be done quite easily?—I had a case sent this morning to Rochester Row from Portland for diagnosis. We diagnosed it in a few minutes.

4060. It can be done quite easily?—Yes. You have to comply with the postal regulations.

4061. There is no risk to the postal people, for instance, if you properly pack it and so on?—No.

4062. And the spirochætes survive, or they are able to be diagnosed and revealed quite easily?—Yes, quite easily.

4063. With regard to the diagnosis of whether a case of gonorrhœa is cured or not by means of prostatic massage, is that generally done in different parts of the Army?—It is the ideal, undoubtedly. It is what we teach at Rochester Row now.

4064. But you do not know as a matter of fact that it is generally practised?—No, I do not.

4065. Then the question of the instruction of the public in the means of avoiding venereal diseases came up. Who do you think should teach this kind of thing?—Some experienced medical man, and not a young man. I would have a man of some standing and some experience.

4066. If you had a system of public dispensaries and hospitals for the treatment of syphilis and other venereal diseases, probably members of the staff would be the right persons to do it?—Yes, they could do it.

4067. I notice you deprecate one kind of teaching, and that is kinema shows with exhibitions of actual patients?—I think kinema shows showing cases would be beneficial. The public do not know what the disease is and they would see these.

4068-9. A little while ago I went to a place and saw an exhibition in which somewhat revolting pictures were displayed of patients, showing the lesions. I thought you objected to pictures showing patients with primary chancres?—I would not show any sexual thing in the pictures. You can get plenty without that.

4070. Then what pictures are you particularly referring to? Are you referring to pictures like those you passed round, with the nose gone?—Yes. I would show that or these tertiary ulcers, or a syphilitic infant or a case of locomotor ataxy on the Kinemacolor, to show the different stages of the disease.

(Dr. Mott.) These are actually shown in the Kinemacolor film that I saw the other day at the National Cash Register Company's place.

4071. (Dr. Newsholme.) I saw them at a private view with Mr. Burns, and they were certainly very horrifying. Personally, I should very strongly object

to their being shown to young people?—Yes, I would cut some of them out.

4072. With regard to the Results of Treatment, Table 3, I should like to ask one or two questions on that. As I understand it, you collected the statistics for about six years of soldiers treated by mercury alone?—Yes.

4073. And the next is a series of cases, I presume, treated with mercury and salvarsan?—Yes.

4074. I am not clear about this, but I put it to you that the two sets of cases are not strictly comparable; that, owing to the popularity of the Wassermann test and the repute of salvarsan, soldier patients have come much more readily for treatment in the last year or 18 months than they did before, with the consequence that in the series of the 152 cases treated with salvarsan you had a much bigger proportion of primary cases than in the 378 treated by mercury alone. If you say the two sets are not comparable, that will explain a good deal of the difference between the percentage of relapses, 3·9 as against 33. Have you any doubt as to that point?—No, I have no doubt about that difference in the cases. They are much the same cases. They are from the same regiment, the Brigade of Guards. There would be the same proportion of primary cases, probably.

4075. But if you look at page 5 of your proof, you will find that formerly patients coming in the primary stage and those coming in the secondary stage were as 1 to 5; but latterly they were 1 to 1, equal numbers. Does not that confirm, if I may call it, my suspicion that the two sets are not quite comparable?—This table was prepared, I should think, a year ago or so. I see your point.

4076. I only put the point, I think it is a very important point; but you cannot at the moment elucidate it?—No.

4077. (Chairman.) They are not comparable unless they are taken at the same stage. You could turn that point up, could you not?—Yes, I could, by going into it; but I could not straight away.

4078. (Dr. Newsholme.) Of course not. I only put the point as a difficulty which occurred to my mind. Then with regard to the decrease of syphilis in the native troops in India—I am asking you now argumentative questions which are against my own convictions—you ascribe the decrease in the British troops in India to the increased temperance very largely?—Yes, I think that has a great deal to do with it.

4079. But there is no evidence of increased temperance in the native troops?—No.

(Dr. Newsholme.) Yet the native troops show a bigger decrease than the British troops.

(Chairman.) They never did drink.

4080. (Dr. Newsholme.) That brings out my point?—Yes.

4081. The decrease is even greater among the native troops than the British?—Yes.

4082. Consequently are we in a position to say that diminished drinking among the British troops has been a predominant cause of the decline of venereal diseases?—I do not think I can say that.

4083. (Chairman.) I do not think you said predominant?—No; it is one of the causes.

4084. And not one of the two most important?—No.

4085. (Dr. Newsholme.) I accept that. With regard to these printed instructions, may I be allowed to suggest that the type is very difficult to read?—It is being reprinted now, and shortened. It was revised the other day.

4086. Then you went into the question of the causes of the decrease, and two of the most important mentioned were improved treatment and increased instruction of the soldiers?—Yes.

4087. The table on page 2 of your proof gives the admission rates. Improved treatment could not have anything to do with that, because they were admitted, I presume, before treatment?—Yes; they were re-admitted for relapses.

4088. But that does not come in these statistical tables?—There are very few re-admissions now,

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whereas before there used to be frequent re-admissions.

4089. But does this table on page 2 deal with re-admissions as well as admissions?—Yes.

4090. Then that point does not hold good. You mention the importance of having free treatment for the poorer classes. This is under your recommendations with regard to the civil population. Do you think it is wise to introduce the question of class distinctions in the case of a disease like this? Would you not allow anybody to come for treatment if they wished?—It is a very expensive drug, and people who can afford to pay for it should do so.

4091. Do you think they would be likely to come if they could afford it easily?—No, I do not suppose they would.

4092. Is it desirable to introduce anything which would make people ashamed to come, or less desirous; that is the point. Turning back to gonorrhœa, you mentioned that you are making some special investigations at the present moment into the treatment of gonorrhœa?—Yes.

4093. Do you know anything about the recent French method of vaccine that is proposed?—Yes, we are using that at the present time.

4094. Is it too early to ask about it?—It is rather too early to give any opinion of value.

4095. But that is under experimental use at the present time?—Yes. We are also treating gonorrhœa by the local application of heat. I can show you these if you come to Rochester Row.

4096. Sir John Collie asked you whether it was not important that all the panel doctors should have access to these public laboratories for the diagnosis of venereal diseases. Do you see any reason why that access should be confined to the panel doctors, and why it should not be made general to the whole of the medical profession?—I think it might be made general to any doctor.

4097. (Chairman.) By your answers to Dr. Mott, I rather gathered there might be cases in which the Wassermann test might be too delicate, in the sense that it gives a positive reaction in the case of persons fit to marry and not infective in any way?—In such a case I should endeavour to get the positive action negative, and if I failed, then I should allow the patient to marry.

4098. You admit the test may be occasionally rather too delicate?—Yes.

4099. As regards your proposal for dealing with the civil population, I suppose you think we should have night clinics to help the working men's treatment?—Yes, I think it is very necessary.

4100. That would probably be essential?—Yes.

4101. One word on the question of notification. A doctor finds that a patient is suffering from contagious

disease, and if it is a particular kind of disease he has to notify that by law. As a matter of principle, should he not be equally obliged to notify by law a disease which is as bad as any of the others that he has to notify, and, perhaps, in some respects more serious. As a matter of principle it would be right?—As a matter of principle it would be; but I would not have any notification at present. I would educate the public on the point and consider later on the question of notification.

4102. Dr. Newsholme explained, I think, that if you are going to have free treatment in public institutions the name will have to come in somewhere?—Yes.

4103. If the name comes in at all, all the evils that you anticipate from notification would present themselves, would they not; and it is just as well in that case to have notification and know where you are?—No; I would treat the whole thing as confidential.

4104. In any case, it is as easy to notify confidentially as it is to treat confidentially, is it not?—Yes.

(Chairman.) In that case, does not the primary objection to notification disappear?

(Mrs. Creighton.) But in that case the notification would only concern those who came for free treatment. Is not one of the dangers of notification, the whole of the class in between?

(Chairman.) That is a stronger argument, I think, for notification.

(Mrs. Creighton.) But you want to get the clerk and the young men of that type to come for treatment; and is not he the person who would be afraid of notification and who would be most likely to go to the quack?

(Sir Almeric FitzRoy.) But is not the application for free treatment implicit notification?

(Mrs. Creighton.) I am not speaking of the class that would come for free treatment. It seems to me that the danger of notification affects the class that would not be likely to come for free treatment.

4105. (Chairman.) But the fact that the clerk was compulsorily notifiable, which might be done quite confidentially, would not frighten him so much?—No.

4106. (Dr. Newsholme.) Might I put the question in this way? You have no objection to notification in so far as it is involved in confidential diagnosis or treatment?—No.

4107. But you object to direct notification which may or may not be followed by treatment. That is your position, is it not?—Yes, that is it.

4108. (Chairman.) And you think that that direct notification could not be kept confidential, or that they would not believe it would be kept confidential?—I do not think they would believe it would be kept confidential.

The witness withdrew.

TWELFTH DAY.

Friday, January 23, 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.

(Chairman.)

The Right Hon. Sir DAVID BRYNMOR JONES, K.C., M.P.

Sir KENELM DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. JAMES LANE, F.R.C.S.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary.)

Dr. JAMES KERR LOVE called and examined.

4109. (Chairman.) You have been aural surgeon to the Royal Infirmary of Glasgow for nearly 25 years and to the Institution for the Education of the Deaf and

Dumb for a similar period. You are also aurist to the Glasgow School Board and to the St. Vincent Schools for the Deaf?—Yes.

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Dr. J. KERR-LOVE.

[Continued.]

4110. And lecturer on diseases of the ear to the University of Glasgow?—That is so.

4111. At what time did you begin to take up the question of the diseases of the ear and deafness generally in children?—I began my inquiries in 1890, when I joined the Institution for the Education of the Deaf and Dumb.

4112. You were asked by the National Bureau for the Deaf and Dumb in London to carry out an inquiry into the question of the causes and prevention of deafness, and that led you to study syphilis as being one of those causes?—As being one of the causes, yes.

4113. Now, as regards the School Board for Glasgow, to whom you act as aurist, do they take any part in the investigations that you carry out? Do they initiate anything?—They do not initiate anything, but they have been very good in permitting me to carry out the work I desired to carry out.

4114. We may take it, then, that the school board authorities do not take any of the responsibility for them, but leave you to carry out your investigations in your own way?—Yes, in my own way, and in my own premises, and at my own cost, of course.

4115. At your own cost?—Yes, at my own cost. I have also to negotiate with the parents, and get their permission to carry out any experimental or research work which I think ought to be carried out.

4115A. That is necessary of course, but that is entirely outside your duties as aurist surgeon to the board?—Yes, but I should like to point out that the school board do not take any responsibility in the matter; I have to do so. I should like also to chronicle here the fact that the school board is very helpful to me in my efforts on behalf of the deaf, and the directors of the Institution for the Education of the Deaf and Dumb are extremely helpful also.

4116. The value of your investigations to a great extent arises from the fact that you deal direct with the parents and the families on your own account?—That is so. This investigation depends entirely on my appeal to the parents in regard to their children.

4117. I see you come to the conclusion that amongst the lower classes syphilis is as severe as it has ever been, but that it seems to be less prevalent amongst the better classes. Is that due to better treatment, do you think?—That is my opinion.

4118. I take it it is a deliberate opinion?—Yes.

4119. And it is your experience that amongst the poorer classes syphilis is hardly ever properly treated?—Treatment may be commenced, but it is never fully carried out. It is a long and tedious business; it requires long attendance and the continual prescribing of medicine, which, if they get it at all, is not continued for any length of time.

4120. What class of person does the poor man, if he has reason to think that he has syphilis, call in to help him?—I fancy he goes to the hospital for treatment, but I do not think he always does so. Of course there is not very much encouragement given to him to go for treatment to a general hospital at present and have his syphilis treated. There is no proper place for him to go to at all.

4121. There are some general hospitals that do not take in such cases at all?—The physician and the surgeon do not want them. They have no proper place for treating them.

4122. You say that all the cases which formed the subject of your enquiry were practically of untreated syphilis?—That is so.

4123. Then generalising, as you do, from a large number of families, you arrive at the conclusion that congenital syphilis as exhibited in the children of syphilitic parents shows a family symptom complex?—Yes.

4124. You have divided that into three heads. Will you explain them please?—The three heads I have put down here are those I have come across in my inquiry into the families tabulated here. But they are not all the heads I would like perhaps to notify under if I were going to notify the disease at all. Take for instance snuffles, which occurs during the first month or two of life. It is perhaps more serious,

and death occurs more commonly at that stage of life than at some of the later stages. It is usually due to congenital syphilis. In my inquiry, however, I did not include snuffles, because by the time a child has reached school age the snuffles have gone, or the child dies before reaching school age at all.

4125. You first mention the very large number of still births and the large number of deaths which occur during the first two years of life, many, you say, due to meningitis?—They are all nearly due either to meningitis or some other effect of hereditary syphilis.

4126. Then you refer to stunted and poorly grown children, many of whom never reach adult life?—Yes, that is the second feature of the complex.

4127. Then you give acquired deafness and blindness, and sometimes congenital deafness, as your third head?—We have long suspected congenital deafness to be due to syphilis, but it is only recently that we have proved it to be so. Acquired deafness arises from other causes as well.

4128. In your experience you say that the treatment of syphilitic deafness in children nearly always fails?—That is so. We can improve the general health of the child, but we hardly ever get the hearing back.

4129. May it be said, then, that practically all cases of syphilitic deafness are incurable?—It is very seldom cured, particularly in the case of congenital syphilis; although, of course, a cure may occasionally take place in cases of deafness due to acquired syphilis.

4130. But syphilitic deafness is usually congenital, is it not?—Yes; but there are quite well marked cases of deafness occurring in adults who have become deaf during the primary stage, and, more commonly, during the secondary stage, of the disease. I should say that in the case of adults there are not nearly so many cases of profound deafness as there are in children. In regard to acquired syphilis, the deafness is not so profound or so common as it is in the case of hereditary syphilis.

4131. So that we must look upon deafness as one of the results of acquired syphilitic disease?—Yes; we call it acquired deafness. We call it congenital deafness if the syphilis be hereditary, and the deafness be present at birth.

4132. Turning to your lecture, of which we have received copies, I see that all your cases are drawn from Glasgow, which you say is a city of nearly a million inhabitants, and that there are about 180 deaf children only?—That is in the institution alone.

4133. That gives no idea of the total amount of deafness generally in the areas which may be served by the institution?—No; because we have in the Glasgow School Board area between 50 and 60 semi-deaf and semi-mute children, many of whom are syphilitic. We have a day school at Govan. Govan is within the municipal boundary of Glasgow, but is not under the same school board. In that school there are 30 or 40 deaf children, so that I am afraid the figure of 180 does not nearly represent the whole of them. It should be stated, on the other hand, that many of the 180 are gathered from the west of Scotland, and not from the city at all.

4134. I take it that the children whose cases you investigated in the schools and institution were nearly all drawn from the poorest classes of the community?—From the poorer classes nearly always.

4135. Of course there would be a good many children under the school board who do not belong to the poorest classes?—Yes, but those are not deaf-mute children; deaf-mute children come chiefly from amongst the poorer classes. I may say that this disease of syphilitic deafness is essentially a disease due to untreated syphilis amongst the poor.

4136. Taking the school board children of Glasgow as a whole, have you any reason to know what proportion of those children are syphilitic?—I am afraid I have not. The cases I get are sent to me as the result of the ordinary medical inspection, and they are sent from the point of view of deafness only, so that there might be an equal number sent to an oculist for bad eyesight. There might be a certain number of syphilitic children sent up with bad teeth, with

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pegged teeth, which are characteristic of syphilitic disease. Again, there might be a large number sent to the skin specialist because of various skin diseases that attend the earlier years, although not the later years, of syphilis. We have not as much skin disease with congenital syphilis as with the acquired forms.

4137. I suppose that there has never been any sufficient test made for syphilitic diseases in school children on any large scale; but could you give us any idea of the number who might be infected?—I could not. They are making a beginning of medical inspection in our schools on a larger scale, and no doubt we shall get that information in time. The information we now have is principally obtained from the observation of the mentally defective, and not of the ordinary school child.

4138. I see you say that the damage to the organ of hearing takes place before birth or during the first years of life, and that in that case the deafness is permanent. Do you refer to deafness arising from syphilitic contagion in that sentence?—If the parents have syphilis, the child may become deaf before birth, if you will allow me to make the statement. But I should say the poison is present and destroys the organ of hearing in many cases before birth; those are cases of congenital deafness due to syphilis. We have some difficulty in earlier years of a child's life, say in the first two years, in saying whether the deafness is severe enough to keep the speech from developing. Of course, deafness may be congenital or it may be post-natal. We try to decide that by inquiry from the parents about any illness that has taken place since birth. If the child has been ill, we conclude that the deafness is post-natal, but if there has been no illness we conclude the deafness is congenital—acquired before birth.

4139. Congenital syphilis may show itself not only in an infant directly after birth, but in the later years of life?—Yes.

4140. What do you call true hereditary deafness in your lecture?—By true hereditary deafness I mean deafness which was present at birth and which is present in the parent of the child. I am speaking of deaf-mutism there rather than other hereditary forms of deafness.

4141. That deafness is not necessarily associated with syphilis?—I think not. True hereditary deafness is seldom, if ever, syphilitic.

4142. The parents, though deaf, and transmitting deafness, might not have any syphilitic taint in them—neither the father nor the mother?—I think that is ordinary hereditary deafness as distinct from syphilitic deafness?

4143. I see you make the statement that the poorest mothers in Glasgow have children weighing 7.1 lbs. The average weight of a healthy child is 7 lbs.?—Yes.

4144. Can we take those figures as really meaning that the poorest mothers produce on the average the heaviest children?—They produce average children.

4145. There is nothing in the poorness of the mother which detracts from the weight of the child?—No. I do not think the poorness of parents affects the children or the community very much. I think we get a fresh start in the course of a generation or two. A child may be 7 lbs. in weight at birth and increase normally for a month or so, but if syphilitic it will fall off in about a month afterwards. The children of syphilitic parents become very poor as a rule.

4146. They fall off afterwards?—About a month afterwards.

4147. You say in your lecture that syphilis is probably the only disease which causes deafness in both parent and child, and the only disease which operates both before and after birth. Is that the result of your experience?—That is so. I am speaking of disease there; I do not mean ordinary deafness which is not due to disease at all.

4148. Coming now to your family trees, each family tree started, I suppose, from one case of deafness which came to your notice, and you made inquiries as to the family history?—Yes. The cases came to my notice in the ordinary course of my work. I should like to

say that this research was not set about by hunting after families. They are the result of inquiries made into cases sent to me, and any man who has school or hospital practice or interests himself in the subject of deafness will get much the same result as I have got.

4149. Having had one deaf case brought to your notice, would you mind telling us what steps you took in regard to it?—The mother was nearly always present with the child, and I asked her, as a rule, whether she would allow me to take specimens of her own and the child's blood. I had to explain as kindly as I could that the deafness was a very serious thing affecting children, and nearly always she has consented. Generally I am able to encourage the mother to let me have specimens of the blood of one or more of the children as well as of her own. In most cases where the family is not scattered I have been able to get a fairly complete Wassermann test of the whole family, with the exception of the father. It is very seldom that I have been able to get his blood tested.

4150. You have come across cases in which, although the mother gave a negative reaction, the children showed positive reactions, and in some cases gave evidence of syphilitic infection. Does that mean that the father can transmit the disease through the mother without infecting her?—He can without causing actual manifestations of the disease in the mother, but not without infecting her.

4151. But the mother must then be infected so little that she does not respond to the Wassermann test?—She has latent syphilis. She does not express it in her own person though she is able to transmit it; she is really a transmitter of the disease.

4152. She can be a transmitter, although she gives a negative reaction?—That is so; it is a well-established fact.

4153. You have summed up your syphilitic families in a table in which there are one or two things which I do not understand. In the column headed "Deaf and Blind," on page 58, do you mean that each of those children was both deaf and blind?—The child may be deaf or blind, or both; it is seldom both.

4154. Take Families 2 and 3, "Mac" and "G." The deafness in No. 2 you put down as acquired, and in No. 3 as congenital. In both those cases the parents gave a positive Wassermann reaction, did they not?—Yes.

4155. I do not quite understand, therefore, how you discriminate between "acquired" and "congenital"?—In family No. 2 the deafness is stated to be acquired. The second child there had iritis and specific teeth, and gave a positive Wassermann. The iritis, specific teeth, and deafness are manifestations of syphilis, because this child was born hearing and became deaf later on.

4156. In that family tree the mother gave a positive reaction?—Yes.

4157. And yet you describe the deafness as acquired?—I am referring there to the deafness, not to syphilis. It is acquired deafness, you know. I should explain that it is the deafness and not the syphilis which is acquired, as you will see from the heading of the column on page 58.

4158. But the deafness might have been syphilitically acquired?—No; it is acquired because it comes on after birth.

4159. I thought you told us that acquired deafness was nearly always due to syphilis?—That is why I call it acquired deafness. In family No. 2 the child did not become deaf for several years after birth, but in family No. 3 the fourth child was born deaf, and has never spoken.

4160. If the child is born deaf, you call the deafness congenital?—Yes, if it is born deaf.

4161. But the term "acquired" simply means that the child becomes deaf at some time after birth?—On account of congenital syphilis.

4162. As the result of congenital syphilis?—Yes, and the term "congenital deafness" means that he is born deaf as the result of congenital syphilis.

4163. In both cases, acquired and congenital, you ascribe the deafness to syphilis?—Yes.

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4164. Out of those 21 families given in this table you got positive reactions in 18 of them?—Yes.

4165. (*Sir Kenelm Digby.*) I understood you to say that the syphilis is congenital, and not the deafness?—Yes.

4166. (*Chairman.*) In 18 out of the 21 cases you got a positive reaction, and two other cases were queried. That means, I suppose, that the result of the test was not certain?—It was doubtful.

4167. In the remaining case the test was refused, and in one of the 18 it was weak?—Yes.

4168. That is a very heavy proportion?—Yes.

4169. The results were very disastrous in those syphilised families, there is no doubt about that?—There is no doubt about that.

4170. Taking the result of that table, it seems appalling that in 21 families you have 172 pregnancies, resulting in 30 miscarriages or still-born children. Including those, there are 75 deaths, nearly all in the first or second years; in addition to those there are 31 deaf or deaf and blind children. There remain 66 living children, of whom many are known to be born before the poison entered the parental blood. You come to the general conclusion on those tables that nearly two-thirds of the children born are dead, or, if they are alive, they are either deaf or blind, or both. That is 106 out of 172. That is an appalling result, is it not?—It is appalling. There is no doubt about it.

4171. You think when a family such as you have been dealing with has become syphilised in any way, that result is what one might expect?—I will put them into percentages if I may be allowed to do so. In regard to two other families (A—n, and R—e), I have dealt with them on pages 72 and 73. Adding them to the others, the result is as follows: In 23 families there are 184 pregnancies, or exactly eight per family; there are 71 apparently healthy living children, or an average of three practically per family. Those are the healthy children left. But many of those 71 are very young, and many gave a positive reaction when tested by the Wassermann test; so that in the long run each parent will certainly not leave one child representative, and those left will be dwarfed and of poor physique. Of course, I do not say that this dwarfed child will be able to transmit syphilis to the third generation. I do not know anything more alarming or appalling in the death-rate amongst children than this in the whole history of the race. If you syphilised a nation at this rate it would not survive more than two generations.

4172. Many of these families, and others like them, would disappear altogether in time?—Yes.

4173. But in some cases freshly-acquired syphilis may supervene and be carried on; otherwise, the disease would kill itself out?—It would kill itself out with the nation that was being syphilised. But as we know, treatment sometimes succeeds in checking it.

4174. But apart from treatment?—Apart from treatment it would take a long time before the poison would disappear. But we do not know how long it would take.

4175. You come to the conclusion that it is doubtful if any disease, even tuberculosis, is so destructive of child life, or so disastrous to child health as syphilis?—That is my opinion.

4176. That is your deliberate opinion. Then, summarising your family trees, you say that the Wassermann reaction or test is nearly always positive when the combination of keratitis—that is, blindness—and deafness occurs in the child of syphilitic parents?—It is nearly always positive when that combination is present.

4177. But occasionally the result may be negative even with the presence of that combination?—I have only known one in my experience.

4178. Even if the result was not positive in those cases, would you still say that the child was syphilised?—Yes, or that it might become positive later on. There are variations in the condition of these children.

4179. Then you refer to meningitis, and you come to the conclusion that it is the commonest cause of death amongst these syphilitic children during the

first and second year of life?—Yes, at that time of life I think it is.

4180. (*Rev. J. Scott Lidgett.*) At what time of life?—From one to two years of age. Perhaps I should exclude tuberculous meningitis there.

4181. (*Chairman.*) You refer in your lecture to ordinary meningitis?—The commonest cause of death amongst the children in those families is meningitis; it is far commoner than any other cause.

4182. You say that untreated or insufficiently treated syphilis in the parent may be discovered by the Wassermann reaction many years after infection?—Yes, many years; 15 or 20 years after, I should think.

4183. After the syphilitic infection has been acquired?—Yes, after a person has had it for 15 or 20 years.

4184. And they still give a positive reaction?—Yes, and probably later. I think the discovery of the micro-organism of syphilis is not yet complete, in the tissues of those who are affected by late symptoms. It is quite likely we may be able to get evidence of the presence of micro-organisms at much later periods than now.

4185. You say that we have in the meningitis of young children of syphilitic families a link between the syphilitic blindness and deafness of the child of school age, and the children who become deaf so soon after birth that they are regarded as congenitally deaf. I do not quite know what you mean by that. Would you explain it?—I mean, that in the syphilitic deafness of these comparatively young children you have something which gradually leads us up to the discovery of syphilis in even younger children still, until, if you are careful enough in your inquiries, you will find syphilis acting as the cause of deafness before birth at all.

4186. Apart from those children who come under your care, of whom you have given us instances, there are a great number of other children who are in the ordinary schools and are making no progress. There are a few in the institutions for the deaf. But those in the ordinary schools are not so very deaf, I suppose, as not to be able to make progress with their studies?—They are not deaf mutes, of course, and they should not go into institutions for the deaf. They come to the Glasgow Day School and are put in the semi-deaf and semi-mute classes which we have now started for them.

4187. But among the ordinary school children there are a number who are not considered sufficiently deaf to be put into special institutions, but are not able to make progress in those schools?—That is so; but I do not think that those children are syphilitic.

4188. Referring to syphilis among the well-to-do, you consider the reason that it does not cause so much deafness amongst their children is really that they get better treatment?—That is so. The father or the mother is generally intelligent enough to follow up treatment, and are able to do so.

4189. On page 68 of your lecture you come to the end of a table of 157 cases. Do those cases include the earlier 23 you have dealt with, or are they a separate set of cases?—All the cases are included.

4190. Out of those 157 cases, apparently 48 gave a positive Wassermann reaction; that is nearly one-third?—Yes. But I should like to make a distinction between the two classes of cases presented in that list. The cases which come to me with keratitis and deafness, that is an effect of syphilis which has come on late in the child's life, say at 8 or 10 years of age, give me a very much larger proportion of positive results, on inquiry into their families, than cases of congenital deafness. In regard to children in the Glasgow School Board, I inquired into the families of children who had their blood tested, including the mother, and got 50 per cent. of positive Wassermann reactions. Whereas, among the relatives of congenitally deaf children, I got nothing like that percentage; I mean among those who had no acquired deafness or blindness in the family, I only got 7 per cent.

4191. You have not, I suppose, been able to form any opinion as to the proportion of cases of blindness

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due to syphilis?—No, I have not; I see it only in association with deafness.

4192. And also of deafness?—No, I do not think I have. I cannot give you that.

4193. You would not be prepared to give us a proportion?—No. We might not detect it at all, even with the Wassermann reaction. I do not know how many children who are syphilised are in the schools at all. You cannot get at the amount of syphilis in this way. I only get the cases that are sent to me.

4194. Then you say that your inquiry established the fact that congenital syphilis does cause congenital deafness?—That I consider to be the only fresh part of this inquiry. All the rest was known before.

4195. You say also that congenital deafness is usually an evidence of expiring syphilis?—I should say that by the time a child who has been born deaf comes to me he or she is probably seven or eight years of age, so that it is at least seven or eight years since the lesion took place, assuming it took place just after the child was born. It is quite within our ordinary experience of the Wassermann test that if it be applied seven years after the lesion takes place we get a negative reaction, so that we could not say positively if we do not make the test for seven or eight years after the deafness first occurs.

4196. We have had some evidence given to us which seems to point to the fact that the Wassermann test may be too delicate, and that it discovers traces of disease where no disease exists?—My experience is different from that. I do not think the Wassermann test is delicate enough, at any rate for congenital syphilis.

4197. That is syphilis in the case of the deaf? In the congenital cases you think it might fail?—Yes, I think it does.

4198. In regard to the G. family dealt with on page 20, that is a very bad case. Out of five pregnancies there was only one healthy child, a year and a half old. There were two miscarriages, one child died of meningitis at 2½ years old, and the only remaining child was born deaf. That is a disastrous family?—Do you mean page 20 of my lecture or family No. 20?

4199. I mean family G., case 108, and tree 3, on page 70. In that family the mother is marked as positive, and the deaf-born child did not give a reaction?—That illustrates what I have been saying.

4200. There could be no doubt in that case that the child was infected?—I think it is open to discussion, but I do not doubt it. I mean to say that someone might say, "That is not sufficient to satisfy me that this deafness is due to congenital syphilis." But to my mind it is quite conclusive proof, taken along with the other facts brought forward. I admit that is a reasonable objection to urge against the position I have taken up.

4201. Have you studied the effects of gonorrhœa at all?—Not at all.

4202. There is no reason to suppose, is there, that gonorrhœa takes any part in producing deafness?—No, not at all.

4203. I suppose that gonorrhœa has not come before you at all in that connection?—No, not at all.

4204. I note both from your paper and from your lecture that you are strongly in favour of some kind of notification of venereal disease. What kind of notification have you in mind?—Of course I recognise that this is perhaps the most difficult part of the subject. You may attack syphilis by a frontal attack by notifying the disease as such, or you may do it by a flank movement by notifying the conditions which in themselves are serious enough to warrant notification. Those conditions I have put down under the family symptom complex here. Take still-births; those are wasteful economically in a nation in which the birth-rate is falling. If you take meningitis it is a very fatal disease, and its pathology is not very well understood. It is often due to syphilis and is a common cause of deafness. If you take the number of deaf children and compare the cost of educating them with that of hearing children, they are at least five times as costly to educate. Therefore I think it

might be more prudent to attack syphilis by a flank movement, and to notify those conditions, following up the information got by treatment for syphilis if the Wassermann reaction or any other test that may be applied indicates its presence.

4205. Who should make the notification, and to whom should it be made?—The notification would be made to the medical officer of health of the district.

4206. And by whom?—By the medical man attending the case.

4207. Take your own practice. If you get a case of deafness, and, after investigating the family, you find that family, including the mother, is infected, what do you do?—I explain to the mother (I have already had to do it in my school practice) that this trouble which has fallen upon her child—it may be deafness from meningitis, or she may have had a series of still-births—is very difficult to cure unless she put herself under treatment, and, without telling her the nature of the disease, I should try to get her to submit to treatment.

4208. But you would notify the health officer that she was infected?—I fancy so.

4209. Confidentially, of course?—Yes.

4210. We have been told by several witnesses that if any form of notification were introduced, it would tend to the concealment of the disease, and cause people to shun treatment and go to quacks and so forth?—I think it might tend to do that. But I would make it illegal for any quack to treat a dangerous contagious disease.

4211. (*Sir Kenelm Digby.*) It is so now?—I do not know that it is illegal; I am not sure that it is.

(*Dr. Newsholme.*) It is not illegal.

4212. (*Chairman.*) Then you would treat syphilis as an ordinary infectious disease for the purposes of notification?—I should do so.

4213. And at the same time, you would provide on a large scale the means of treatment for the poor?—In the hospital, yes.

4214. And, of course, free treatment for those who could not afford to pay for it?—Yes.

4215. The process would be that there would be no compulsion upon them to take treatment?—The medical officer would know that this family was infected, and if that family went on increasing, the results would be disastrous. The medical officer would not require to interfere if he were satisfied that treatment was being carried out.

4216. There would be no compulsion on the mother to take treatment, and she would be likely to produce more infected children?—I think you must have some sort of hold over the mother to compel her to take treatment.

4217. Then what would you hold over her?—I should think that very often the mother would be the first person to welcome such treatment. I should think that compulsion would be very seldom necessary, but if necessary I should apply it.

4218. You think a friendly visit from the doctor, who would say to her: "I have discovered that you 'have a dangerous disease which will affect your family, and cause their lives to be ruined; you really 'must be treated for it. You must go to so-and-so 'and be treated'?"—I think that would be quite sufficient for the mother, but perhaps not always for the father.

4219. The father would very likely be the most important agent in the matter?—Yes, I fancy so. I do not know how you are to compel him to submit to treatment. I should hope that education would incline the father, as it might all of us, to regard syphilis as an ordinary infectious disease, as it really is.

4220. Do you think the fact that a father knew that his name had been confidentially noted by the medical officer of health as an infectious person would be likely to induce him to go for voluntary treatment? I think that would be a strong argument with him so long as he was sure that the information would not be used against him.

4221. Take the question of the notification of death. At present the Registrar-General's returns are almost

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useless from our point of view, because syphilis in some forms is not returned at all. Would you make it incumbent upon the medical man certifying a death that if he finds it is due to syphilis or a disease caused by syphilis, he should report it to the registrar?—Yes, under its proper heading. He might report specific meningitis.

4222. And would you make it compulsory on the certifying officer to make those returns?—I do not think it would be sufficient unless it was compulsory. If it were compulsory there would not be the same risk of the doctor and the patient quarrelling over it. If it is optional, I do not think you can expect a certifying medical man to tell the whole truth, because he would quarrel with his patient if he did. If they both knew that he must report, then there would be no quarrel.

4223. You would have the truth told confidentially, I suppose, and the officer would only publicly certify that the patient had died from certain causes?—Specific meningitis, say, without referring to syphilis at all. That would be enough for the purpose.

4224. If the family knew the death had been due to specific meningitis, they would not feel any stigma attaching to them?—In the case of working-class people they would not know at all what it meant.

4225. (*Mr. Arthur Newsholme.*) I was very interested in your remarks about meningitis. Do you regard that as very commonly due in children to syphilis?—Yes, very commonly due to syphilis.

4226. Next to that, tuberculous meningitis is, perhaps, the most common form in children?—It is very common.

4227. As a matter of fact, in England and Wales in 1911 there were 5,187 deaths from meningitis, not more particularly described; of those, 3,267 were children under five years of age. Inasmuch as those cases were not described as tuberculous, it is quite possible, and even probable, that a very large proportion of those were due to syphilis. There is a separate category for tuberculous meningitis?—You have excluded those from those figures?

4228. Presumably that is so, except for the instances where the practitioner has not adequately filled up the death certificate. If he puts "meningitis," we are bound to put it under that heading, and then it might come in this category?—And has cerebro-spinal fever been excluded from that list?

4229. No, it was not excluded; but, as a matter of fact, there were only 134 deaths certified as due to that?—I should fancy that many of those were due to syphilitic meningitis, that is amongst the children.

4230. Can you not give a more exact proportion?—No, I am afraid that I cannot.

4231. Now, turning to another table in the English Registrar-General's Report, in 1897, among the deaths of male persons of all ages, 267 occurred from meningitis per million living; and the number goes down steadily until in 1911 it is 168. That appears to indicate a very great decrease in the death-rate from meningitis?—I suppose otitic meningitis is included there?

4232. Yes?—That has gone down very much from better treatment.

4233. Do you think it would be safe to infer from that table that syphilis, which forms a high proportion of these cases, has also gone down?—Probably it has gone down in that time from better treatment. But how many of those are syphilitic meningitis certified as such—very few of them, I suppose.

4234. None?—I fancy that syphilitic meningitis is not a very common disease amongst adults.

4235. No?—So that I do not think I can give you any nearer estimate than that.

4236. You would not personally be willing to argue from those figures of deaths from meningitis that probably syphilis has also gone down?—I operated yesterday on a case of otitic meningitis in a syphilitic patient. I do not think syphilis had got anything to do with that. There was very little suppuration, and I fancy it should be put down as ordinary meningitis and not as syphilitic meningitis. I do not think

syphilitic meningitis amongst children has gone or is going down.

4237. Turning to another point, you answered a question just now in alluding to the decline, that it was due to better treatment?—Yes.

4238. What evidence is there that it is due to better treatment rather than to less prevalence, or what evidence have you that both factors have not been in operation?—There is evidence that people who are well off get better treatment for syphilis than they used to get. It is the poor who do not get treated, and my family investigations go to show that the untreated disease is about as disastrous as any disease can well be.

4239. Do you think on the whole there is a smaller quantity of badly treated and untreated than in the past?—Yes. I think for instance the tertiary forms are not so common as they were.

4240. You mentioned in your proof still-births, the large number of deaths during the first two years of life, stunted children, acquired deafness and blindness, and sometimes congenital deafness. That does not cover the whole category of symptoms due to congenital syphilis?—Perhaps not. But you could not very well certify a man or a child as having deafness without calling that syphilitic deafness. But you could certify a child as suffering from meningitis, because it was meningitis, which is a dangerous disease. It would not be necessary, however, to certify a case of syphilitic eczema because eczema is not a deadly disease.

4241. You do not consider that as able to spread from the syphilis from the diseased skin, as in the case of some other skin diseases?—I fancy syphilitic eczema is worse than ordinary eczema, but I cannot say definitely, because I am not a skin specialist at all.

4242. With regard to the still-births, do you remember what proportion they happen to bear to the live births in this country?—No.

4243. It is between 2 and 3 per cent. That being established, have you any views as to the proportion of still-births which are likely to be due to syphilis?—No, I have none.

4244. Would it be a large proportion or small proportion?—A large proportion I should say.

4245. Still keeping to the question of ante-natal syphilis, do the still-births represent the total damage to life due to syphilis. I want to bring out the case as to the numerous abortions due to that disease?—I have included the abortions here.

4246. In my percentage of 2 to 3 per cent. they are not included; only foetuses after the 28th week?—I fancy not, although I think they occur. The probable time is from seven to eight months.

4247. You have no definite evidence on that point?—No, only those figures which show that in syphilitic families still-born children are very common.

4248. Do you know whether syphilis is a common cause of failure of conception?—I cannot say at all. I have no reason to have an opinion on that.

4249. If it were such a cause, then syphilis would affect the birth-rate in three ways; by preventing conception, by causing abortions, and by causing miscarriages after the 28th week?—I know, as a matter of interest, that it does prevent conception, but I have no experience of it.

4250. It is not your special department?—No.

4251. With regard to these family lists of yours, the syphilitic generations you spoke about, you show how in a couple of generations these families almost die out. There have been great national experiments in that, have there not? Take the history of the Maories. I think it is commonly known that their decimation is to a very large extent due to widespread syphilis. Does that come within your knowledge?—I have read it in connection with a discussion that took place at the Royal Society of Medicine a year ago, but I know nothing about it at first hand.

4252. It is true also of the Fijians?—I know; but I cannot give a personal opinion.

4253. You lay particular stress upon the large extent to which syphilis is untreated amongst the poorer people. If the disease is untreated among the children of these poor people, how are you going

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to secure notification?—It is almost sure to be known. First of all you have the repeated miscarriages—

4254. May I put the question in another way. By whom would the notification have to be made?—If the cases were discovered by the school medical officer, by him.

4255. At any rate, by a doctor?—Yes.

4256. We are agreed, then, that a doctor must notify this disease. But if there is no treatment by a doctor there can be no notification, can there?—If there was inspection there might be notification without treatment.

4257. With that one exception of the school medical inspection, the attendance of a doctor for purposes of treatment is necessary in order to secure notification?—Yes. Of course, it is not true that the school child is not treated for syphilis, because we treat them now.

4258. In your very interesting lecture you make a point of the fact that a considerable proportion of these cases of deafness is due to absence of treatment?—Quite so. What I meant was that we were beginning to treat them in the schools now.

4259. Might we ask what is the object of notification?—Treatment, certainly.

4260. Will you tell us why you advocate notification?—In order that the child who has become or who is becoming deaf may be treated for it.

4261. Then the main object of notification is to secure treatment?—Yes, to secure treatment and prevent infection.

4262. There are other objects, of course, but the main object is to secure treatment?—Yes, to secure treatment.

4263. But inasmuch as you cannot have notification until some kind of treatment is in existence, you are in a vicious circle, are you not? If the case is being medically treated, the object of notification has been gained without notification. If the case is untreated then you cannot have notification?—Well, you see the school child was really a very large factor.

4264. If I may leave out the school child, there, I admit, the axiom does not apply?—You mean the patient comes to the practitioner for treatment?

4265. My point is that if a case is being treated, the object of notification has been gained without notification?—Not necessarily.

4266. If the case is untreated, then there can be no notification?—I cannot admit that, because whilst many cases of syphilis amongst the poor start treatment, there are many cases in which it is not continued. It is long continued treatment which is necessary.

4267. Then we come to the third category: we have had two before. We have had better treated cases, and untreated cases, and now we have the third, the insufficiently treated cases?—That, perhaps, is the biggest of all.

4268. Amplifying your statement, that category probably is the biggest of all?—I may say that I have said treated, untreated, or insufficiently treated; the lecture is quite specific on that.

4269. I accept that. With regard to the insufficiently treated cases, the question arises, at what stage does this insufficient treatment begin?—I have only to do with syphilis, you understand, in its congenital form here. But I fancy the insufficient treatment is on the part of the parent who is suffering from the primary symptoms of the disease which he has contracted. If he were thoroughly and persistently treated, and for long enough, there would not be congenital syphilis.

4270. So that your point is, that if the parent who knew he had syphilis and was being insufficiently treated for it at that stage had been notified, his treatment would be persisted in, and consequently the baby would not have been born deaf?—Yes. I should compel that man to keep under treatment in the interests of his family.

4271. You will accept the dictum that only a medical man is competent to notify a case of syphilis?—In the case of an infectious disease, as far as I know, only a doctor does so now.

4272. With regard to Glasgow, you are familiar with the system of notification there. What has happened there as the result of notification?—The visitor from the health office goes to the house, and if he is satisfied that the conditions are sufficient and good for isolation and treatment, nothing more is done until the case is finished with, when, of course, disinfection takes place. (I am speaking here of infectious diseases other than syphilis).

4273. You mentioned a possible alternative course, of a flank attack on the disease?—I prefer that in the meantime.

4274. Let us exactly know what you mean by a flank attack. Do you mean providing free treatment of the disease to begin with?—I would notify meningitis, which is probably syphilitic, to begin with.

4275. So that you modify your flank attack, and would notify meningitis. Supposing a patient has keratitis, would you make that a notifiable disease?—Yes.

4276. Similarly, with a still-birth, you would make it notifiable?—Yes, or at least a series of still-births.

4277. In every instance?—Yes, and probably snuffles, which is a syphilitic symptom also.

4278. If you can get those cases that come to places where free treatment is supplied, would not you get them instantly notified to the hospital authority, and get everything done from the point of view of preventive medicine?—Many of them go to the general practitioner, and not to the hospital at all.

4279. If the general practitioner is adequately educated in his work, would you similarly get him to impress upon the people the desirability of treatment?—I should try to do so.

4280. There is really a lack of confidence in the ability or willingness of the practitioner to press for giving continuous treatment?—I know a general practitioner on the panel who sees from 30 to 40 cases during his two hours; he does not fill in any details of the cases during those two hours, but he fills in anything he likes after everyone has gone. You must have something better than that for the purposes of notification.

4281. In regard to that particular man's practice, you say he sees his patients in a wholesale manner, and does not examine them properly?—Yes.

4282. How is he going to notify syphilis?—He would have to be paid for doing it, of course.

4283. You would trust that man's certificates if he were paid?—Yes. I know this man pretty well, and he is not such a bad fellow after all; but the system under which he is working is bad. That same man would not notify enteric fever carelessly; he does not, as a matter of fact.

4284. May I give you an analogy of what I think is the preferable course. Some years ago in Brighton there was a voluntary system of notifying all cases of pulmonary tuberculosis. At the same time, Sheffield had got compulsory powers for the notification of the same disease. The two systems were run concurrently as big municipal experiments in the notification of consumption. It was compulsory in Sheffield and voluntary in Brighton. But the proportion of the total number of cases notified all through that series of years was much higher in Brighton than it was in Sheffield. The only difference between the two towns was, that in Brighton, treatment was provided, something was given to the patient which made him anxious to be notified. In Sheffield that was not done. Do you not think that illustration points the way in regard to syphilis?—Certainly, I should have all treatment that is provided for syphilis provided free. But I am not at all sure that the offer of such treatment would form a strong reason for submitting to that treatment, so long as there is so much inducement to conceal the nature of the disease.

4285. (Chairman.) You cannot argue from tuberculosis, to which no stigma attaches, to syphilis, where such a stigma attaches?—There was a considerable amount of objection to the notification of tuberculosis at first, but it has almost passed away, and I am sure any stigma attaching to the notification of syphilis

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would pass away in time. That is my argument for a flank attack as against a direct assault to begin with.

4286. (*Dr. Newsholme.*) Supposing there was this stigma attaching to the notification of syphilis, how could you get anything like adequate notification? Would it not mean concealment, or, as has been already pointed out, the man would go himself, or, if he were a parent, would take his children if they were syphilitic, to a pharmaceutical chemist or herbalist rather than to a qualified practitioner?—He would take himself rather than his children there. I think he would take his children to the right people if not himself.

4287. So, if I understand you now, you apparently have no objection to the notification of such diseases?—To begin with you must do it gradually; but in the long run, if you want to exterminate this disease, you must notify every time.

4288. But you abandon every idea of notifying syphilis as such?—In the meantime. On the one side we have hedged this disease round with a deal of mystery; it must not be spoken of. On the other side you have this germ which you want to dislodge, and you have to come down to its terms, it has no ethical or moral hedge round it. It must be treated on strictly material grounds. You have to come down to its terms if you want to exterminate it.

4289. Imagine you have got notification apart from inspection. A case of keratitis is notified to you as medical officer of health, and you or your assistant goes to that house, tells the mother the nature of the disease, and advises continued treatment. Do you anticipate any possible family quarrels as the result of that?—Between the husband and wife?

4290. Yes?—If a plain name were given to the disease I think probably you would have.

4291. How would you keep that from coming out?—I would not call it syphilis at all. I would tell them, "This is a dangerous blood infection which you have, and it can be got rid of by treatment." I would expect most parents, without saying too much about it, to agree to the treatment of the children or themselves. Ultimately it will come to that, and there will be no trouble about it.

4292. But you have already told us that the ordinary working man will not keep on with the treatment. Keratitis, of course, is more common amongst the working classes, and if a child suffering from keratitis got considerably better the mother would cease the treatment?—The case would still have to be supervised.

4293. Secondly, the mother has no symptoms of the disease, but she has been a carrier of the infection?—Many of these women who have the taint are in poor health.

4294. And commonly, although she has been infected, her symptoms are very slight. Yet she has been the means of carrying the infection from the father to the child, and needs to be treated for months?—That is so.

4295. How are you going to persuade her to be treated unless you reveal the true nature of this dreadful disease?—She will be visited by some medical man, who will give his opinion as to whether health is improving or deteriorating, and he will guide her as to treatment, or advise her to go to a hospital to be treated and to come back again when she was well.

4296. You think, in the absence of any information as to the real nature of the disease, you would get good results from the course you suggest?—I think we would get better results at any rate than at present.

4297. You are not inclined to modify your opinion, and think that gratuitous diagnosis and hospital treatment would be the best line of flank attack to begin with?—It would not nearly stamp out syphilis.

4298. But would your flank notification, as you call it?—It would help; it would prepare the way for what must come—for universal notification of all infectious diseases which are disastrous to life.

4299. And free treatment would also help, would it not?—I do not see why you should not have both.

4300. You attach much importance to the provision of free Wassermann tests, do you not?—Yes.

4301. That is being done in Glasgow at the present time, I think?—Yes.

4302. By the municipality?—Yes, and without any cost to the practitioner.

4303. A large number of cases have been examined, I see?—That is so; but they are not very satisfactory, because they do not send in enough blood.

4304. They do not send in good specimens?—They do not send in good specimens.

4305. But that can be got over by means of education?—The doctors do not, because many of them do not understand what it is. I have had men come up wondering what this operation is, and saying "Let us see you take off blood for the Wassermann test." The education on that particular subject is particularly crude.

4306. You mentioned as one result of notification that it would probably lead to concealment of the disease, and the remedy you suggested was that you might make unqualified practice illegal, I think?—Certainly with regard to dangerous infectious diseases.

4307. But when you mention restrictions in that particular way, are you not begging the major premise? How is the patient or the quack or the pharmaceutical chemist to know that it is a dangerous infectious disease?—There is a difficulty there, I admit. But there is no doubt the men who do most of the unqualified practice now have a large experience of this disease. A quack knows perfectly well that he is dealing with an infectious disease.

4308. But you do not expect a pharmaceutical chemist to notify the disease, surely?—No; he is not sufficiently educated. A chemist should not prescribe at all. I am speaking of the quack doctor. He has had a large practice in venereal disease, and knows perfectly well the kind of disease that has to be notified.

4309. (*Mrs. Burquin.*) I think you told us you considered deafness was really the result of untreated syphilis?—Chiefly the result. We do not get it in the better classes.

4310. You do not get deafness among the better classes?—We do not get nearly the same amount of congenital deafness, or of deafness coming on during the school period in the better classes.

4311. So that really syphilis costs the education authority a good deal of money?—Enormous sums. They do not know it or they would not pay it. They pay 40*l.* a year for the education of each deaf child in an institution. We have one or two cases in Glasgow (you must have many more in London) in which a single syphilitic deaf and dumb child is costing almost the whole salary of a teacher. A teacher cannot attend to more than one or two of these children, and you know that in the most successful cases only one child is treated amongst the blind and deaf by a single teacher. Therefore the amount of money spent over this neglect of syphilis in this country is enormous.

4312. It would really be an economical thing for the State to take the matter in hand?—It costs the State a little over 4*l.* a year to educate a hearing child. The child is at school for eight or nine years, so that his elementary education costs about 40*l.* altogether. But to educate a deaf child costs 40*l.* a year in an institution and he is there until he is 16, instead of 14, two years longer than the ordinary child, so that his education costs ten times as much. There are about 4,000 deaf children being educated in England alone.

4313. I take it the blood tests you obtained were taken from the people attending the Royal Infirmary or the Institution for the Education of the Deaf and Dumb?—And from the school children.

4314. By whose authority did you take the blood tests of the school children?—By the permission of the board. But I had to do it at my own risk in my own rooms, and at my own cost.

4315. I will press you on this point if I may. I want to know how far the school board was responsible for your act?—They were not responsible for it for a moment.

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4316. They were not responsible in any way?—No

4317. It was your own personal responsibility?—It was my own personal responsibility entirely.

4318. Is it fair to ask you what you would suggest it would cost your school board or any other school authority to do what you think they should or might do?—You know what a school board or a school authority can do in the way of keeping a child clean. They can force a child to be brought to school clean; so why should they not have power to force an examination of the child's blood? They are able to force a child to be treated medically—at least to be medically inspected—so why should they not be able to cause the inoculated or poisoned child to be properly treated?

4319. Because you think that unless you can have the blood tested you cannot get a true test for syphilis?—I do not go that length. A case of keratitis with deafness coming on in the school period is quite clearly to me syphilis, even if the Wassermann reaction is negative.

4320. You would give the education authorities the power?—Yes, I would.

4321. You told us that many of the children come into the Institution for the Deaf in Glasgow from the west of Scotland to you from the country districts?—Yes, away in the Highlands, as far as Skye.

4322. So that syphilis is present in those country districts?—Of course there is syphilis in those country districts; but I do not mean that any of the congenitally syphilitic children are from Skye. Syphilis is comparatively rare in the country, and common in the city.

4323. As to notification of syphilis, you said you would make it confidential?—Yes, I believe I should.

4324. But if you make it confidential, what follows on it?—The medical officer of health of course must approach the individual or the family with regard to the treatment. But the fact need not become the property of any large number of lay people, or any number of lay people at all. The medical officer need not interfere unless he is dissatisfied with the treatment.

4325. It must become common knowledge amongst a great many people surely?—Not necessarily.

4326. You said that except in very rare instances, you did not get a blood test from the father. I do not quite understand why?—It is the mother who brings the child to me. The father is at work and cannot be seen; so that I get blood tests of the child and of the mother, but not often of the father.

4327. The prime sinner you do not get any test from?—No, not as a rule.

4328. You would recommend that it should be obtained from the father?—I think so.

4329. Probably the father is more likely to have infected the mother?—That is the usual way.

4330. Therefore it seems to me it would be much better if you could insist that the father should be inspected?—I do not mean to say the father retains the power of communicating the disease the longer. The poison may die out of the father's blood, and yet the mother will go on having syphilitic children. I would make no distinction of sex. I would have the father's blood, figuratively and actually.

4331. In regard to another remark you made, in speaking about the man who does voluntarily present himself at the hospital and ask for treatment. I think your phrase is, the surgeon does not want him?—No, and the physician does not want him; nobody wants him just now.

4332. Would the feeling of the surgeon be "Well, this fellow has got this disease; it is his own fault?" Is that the attitude of mind? Why does not the surgeon want him?—We do not want dirty cases of any kind in our wards. This is an infectious disease.

4333. I agree?—At the same time, if the surgeon had an arrangement in any ward or group of wards for the treatment of this disease, I do not see why he should not want the syphilitic patient.

4334. Would you provide treatment for him at the general hospital?—Yes, I would. I would not have a special hospital for these cases. I might have a

special ward, or a special set of rooms. And I will tell you why. If you have a special hospital, you will not get people to come to it so readily as to a general hospital. I would make it as easy as possible for the syphilitic patient to get treatment.

4335. You think if we try to do away with the shame attaching to having the disease, it would be better in the end?—From my point of view it would and from the point of view of exterminating the disease it would. I do not mean to say it has not its social aspect; but I should ignore that altogether in dealing with such a disease as syphilis, and forget the social and ethical aspects altogether.

4336. To attain that end, you think that to provide accommodation at the general hospitals would be the best way of doing it?—I should think so.

4337. (*Sir John Collie.*) It has occurred to me that for the benefit of some of the non-medical members of the Commission it might be useful for you to describe to us and draw a parallel between the ordinary carrier cases of typhoid and scarlet fever, and what we might call the carrier cases of syphilis?—I do not know that I am the man to do it. Of course syphilis is often communicated by carriers—by people who do not know they have the disease.

4338. Would you mind describing first what a carrier case is of typhoid or diphtheria or scarlet fever?—A child is sent out of the hospital after scarlet fever during the 13th week with a suppurating ear. It comes home and sleeps for a couple of nights in its own house. Another child who has been away from the house during the whole time the other has been away is brought home because the sister has now come back from the hospital. In two or three days the second child is down with scarlet fever although the first child has been dismissed from the hospital as free from infection. The suppurating ear in that case has been the carrying agent.

4339. Now with regard to the parallel?—The parallel goes even further with syphilis, because the mother, of course, may be infected without apparently suffering from the disease, and syphilitic children result. The father, or any syphilised person, may have a sore which he does not regard as infectious, but from which it is quite easy to spread infection.

4340. I have only one or two questions with regard to notification. Do you not think it would be very difficult to bring home to a herbalist that not only was he treating a disease, but that he was treating an infectious disease?—That is so. I do not mean to say that it is an easy thing at all. I am quite sure that it is a very difficult thing, and a thing that will only be done thoroughly after a good deal of experience. But it is a thing which ought to be attempted. I should keep herbalists from treating syphilis.

4341. I do not know if you have read the National Health Act, but probably you are aware that permission is there given for the general public to be treated by herbalists if they wish it?—I do not see why they should not.

4342. Do you not think there would be any difficulty, having one Act of Parliament which encourages these people, and another which actually penalises them for doing the same thing under the existing Act?—Not if it could be brought home to those people that they were treating an infectious disease. I think it would be quite right to stop it. But I might break my leg and allow a Christian scientist treat me; I can please myself about the matter, and no harm is done. But I dare not have syphilis and let that person treat me, because I am suffering from an infectious disease and have become a danger to the community. I am my brother's keeper at once when I contract syphilis.

4343. You do not deny the difficulty there would be in bringing home the knowledge of the fact that the quack knew that such and such a disease was in itself syphilis?—I think ultimately you could convict him through the mouth of his patient. He ought to have asked, or, if he was told so-and-so, he ought to have known he was treating syphilis, an infectious disease.

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4344. Do you agree generally that notification would lead to concealment?—I am sure of it. In the present state of public opinion, it would certainly.

4345. Do you think that the concealment would be at the earlier or at the later stages of the disease?—At the earlier stages I should think.

4346. Are the earlier or the later stages the most infectious?—The earlier stages, I think.

4347. You are then tied down to this, you frighten people at a very early and infectious stage from having the very thing we are anxious they should have, treatment at the very early stages?—Yes. But I think there we are perhaps of different opinions.

4348. I am speaking of syphilis?—So am I. The later stages are the most dangerous to the family.

4349. I am speaking of the dangers to the community, and of spreading the disease. If at the earlier stage, which is the most infectious, these people are to be deterred from proper treatment, then I think it follows that the spread of the disease would be rather encouraged by notification than otherwise?—The things I have asked to be notified immediately are the effects of congenital syphilis. I have not advocated, and I am afraid it would be useless, to put into operation at once the direct notification of syphilis.

4350. I am glad I have got that out, because you are really thinking of notification as applied to your own particular branch rather than the general question of syphilis?—That is so; I have put that down clearly here. But although in the long run universal and compulsory notification should be enforced, I do not think it is feasible now. I think if you are going to make progress you must notify those conditions and not stigmatise them as being syphilis just now, although you know them to be so. I think that is the way to success in dealing with this disease.

4351. Just one thing more. Are they still as nervous of the law of slander in Scotland as they used to be?—I do not know.

4352. Do you not think there would be great danger of slander actions if notification were in force?—I should hope that we would become educated to the advantage of notification.

4353. (*Rev. J. Scott Lidgett.*) Would you mind enumerating the causes of congenital as distinct from hereditary deafness?—In one of my earlier lectures in this little book that is pretty well given. The list, of course, is a very long one, if I am to go into it in detail. Perhaps I can do it from memory. The principal causes of acquired deafness are syphilis, scarlet fever, measles, and meningitis.

4354. Scarlet fever does not act upon the unborn child?—Not in acquired deafness. About 25 per cent. of congenital deafness is probably due to an hereditary deafness. That is to say—it is deaf-mutism I am now speaking of—it occurs as deafness either in the father's generation, the mother's generation, or the grandfather's or the grandmother's generation. About the same amount of congenital deafness might be syphilitic.

4355. That is to say, about 25 per cent.?—About that, I think, although I cannot prove it. There is a large number of cases of congenital deafness that we cannot explain at all.

4356. Is it probable, if you could explain them, that syphilis would claim some portion of those cases?—I should be putting it at the outside probably if I said 25 per cent.

4357. 25 per cent. is the maximum amount of deafness due to syphilis?—The maximum. Under that head I include sporadic congenital deafness and a large number of cases that I cannot explain.

4358. You say that although the mother's reaction might be negative, she might be a transmitter of syphilis. Is it your opinion that in cases where the father is the cause of infection the mother can transmit the disease without herself being contaminated?—I think she must have the disease in her blood although she gives a negative reaction. Both parents may give negative reactions, although some of their children give positive.

4359. Is there in your judgment any time at which people who have this taint, although giving a negative

reaction, cease to transmit this poison?—I think the poison tends to die out with the mother and father in time.

4360. After what time?—We used to think it was five or six years. But in view of the revelations of the Wassermann test we must consider it to be very much longer—15 years or perhaps very much more.

4361. You spoke of making a flank attack upon the disease. Would not that necessarily be inoperative, as the knowledge of what you mean by these descriptions grew?—I do not see how it could grow. I do not see how people could get to know they were being treated for syphilis at all.

4362. I thought one of our objects was to make an end of what is called the conspiracy of silence in regard to these matters?—You could do that only by education as the knowledge of the disease and its nature grew.

4363. Is it not felt by most people that one of the chief dangers is, that if this is so shrouded in mystery, people will not understand the cause of this disease?—I am sure notification is not the proper way of breaking this silence.

4364. Can you have a policy of educating the public on the one hand and suppressing knowledge on the other? Are those compatible with one another?—I offered an article to one of the London journals the other day on syphilis and called it syphilis and advocated frankness in regard to it. But they would not have an article at all on that subject.

4365. We are trying to get rid of that. Do you not think that at any rate the quacks would spread broadcast these explanations in order to get people to submit themselves to treatment?—We would do away with the quack for infectious diseases, I hope.

4366. I am putting what suggests itself to my mind: the incompatibility of cloaking on the one hand and not cloaking on the other?—I do not see how, if you call it syphilis; but if you call it meningitis you are not.

4367. On the other hand you do want the public to understand that certain cases of specific meningitis are due to their own immoral conduct?—Yes, but I should not tell a particular parent that through a notification form.

4368. You cannot tell the public that when it has come home to a particular parent. That carries me on to another point. You say that in order to deal with this disease you would do away with the shame and forget the ethical and moral standpoints?—So far as treatment is concerned.

4369. Do you not think the spread of knowledge and the inculcation of shame will be in the long run the more effective way than doing away with shame in order to secure effective treatment?—Most of the people who have this disease are not guilty. None of the mothers or the children have anything to be ashamed of.

4370. Most of the people?—None of the mothers or children have any cause for shame.

4371. Is not it putting it rather high to say most?—I do not know anything about primary syphilis. I am only speaking of family syphilis. I have had nothing to do with primary syphilis for 20 years.

4372. In most cases where the mother has syphilis I suppose the real offender is the father. That is to say you blame the man as the cause?—The mother does not know why she is in ill-health.

4373. Then I presume we cannot stamp out the disease without dealing with the fathers as well as with the mothers?—You must have universal notification, before it is stamped out.

4374. To cause the community to understand clearly the nature of these diseases; and to show that while it is shameful to have them, it is still more shameful not to have them effectively treated?—If you have a man suffering from delirium tremens, and you cut off all his alcohol, no doubt you will cure him. But there will be an awful row for several days; and there will be an awful row for some time after the coming in of the compulsory notification of syphilis. I am pleading for notification which will lead to better treatment at

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[Continued.]

once, and which will pave the way for general notification.

4375. Your immediate advice for the moment is an interim device pending the spread of knowledge?—That is so.

4376. (*Canon Horsley.*) Is the red hair mentioned in the family tree on page 49 a symptom of degeneracy?—No, but there is a very interesting fact about all infectious diseases, which I daresay some of you already know, that when red-haired people are admitted into a hospital, or fair-haired people, it gives the medical officer more anxiety than when dark-haired people are admitted.

4377. So that red hair is not a sign of degeneracy at all?—No.

4378. With regard to notification, there is a whole class of diseases some of us would like to make compulsorily notifiable. You must notify scarlet fever and you may notify measles, but in some cases you must notify measles?—In very many places you must notify measles.

4379. But still there are some remaining where you need not, but can if you like?—I think we should notify all measles. It is one of the commonest causes of serious ear diseases.

4380. Would not it do to have syphilis put into that class in which in a certain locality it might be compulsorily notifiable, and in another locality it need not be so?—It would give a certain amount of latitude.

4381. It would be more desirable in Portsmouth that it should be compulsory than in a place like St. Albans?—Yes.

4382. Then, if it were in that category, it would do away with some of the difficulty?—It is a very serious danger to the community. I do not see how you can discriminate between different districts.

4383. I think you agree that salvarsan is an expensive cure; but at any rate it would be more economical than neglect?—Yes.

4384. Would you say prevention is more economical than an expensive cure?—Yes.

4385. What do you do in Glasgow in regard to prevention?—I do not know, but I am afraid not much.

4386. Do you know anything about the number of prostitutes there are in Glasgow?—I do not know.

4387. Do you think they are very numerous?—I fancy about the average number for a seaport town?

4388. Is it a garrison town?—We have about a thousand soldiers only.

4389. Is there also a large amount of illicit prostitution in Glasgow?—I have no doubt.

4390. In spite of the presence of a large number of Irish?—There are 200,000 Irish in Glasgow.

4391. They are mostly from the North of Ireland, I expect; there are more from Belfast than from Cork? I fancy our rivetters are from all parts of Ireland.

4392. You think there is a great deal of illicit prostitution?—I do not doubt there is.

4393. But you have heard whether there are from the rescue homes you have there, for example?—I do not know.

4394. Are there any societies for inculcating purity amongst men and so on, do you know?—Yes, beginning with the boy's brigade, and going up.

4395. There is no other society dealing with purity amongst men?—I do not know about that; I think there is.

4396. There have not been any large public meetings on the question of purity, I suppose?—I do not know.

4397. (*Mrs. Creighton.*) If there were cause to suspect syphilis in a child, say, if in one of those families, the first child was all right, and the second child was ill and was treated at once, would you be able to stop such a thing as deafness developing?—I should think so.

4398. You think you might be able to do it?—Yes.

4399. So that if you once discovered, on the birth of the first child, that a family was syphilitic, you might do a great deal for the subsequent children?—Once you made the Wassermann test you would make it in each case and act accordingly, I think.

4400. Do you see much hope of getting the father's blood tested as well as the mother's?—That is probably the most difficult part of notification. It is very difficult to get a specimen of the father's blood.

4401. I think it has been already said that unless we can get the father's tested as well as the mother's, the whole thing rather breaks down?—No, I do not think it does, because I think the father often loses infection before the mother does.

4402. That is a scientific fact, is it?—He has the disease earlier; he may have it five years earlier than the mother, or he may have it six months earlier, but in any case he has it earlier.

4423. I gather from what you said about the Wassermann test that it is not by any means absolutely certain that syphilis may not exist when the result is negative?—That is so. But whenever it is positive in this country it means syphilis.

4404. When it is positive it means syphilis, you say, but when it is negative it does not necessarily mean that there is no syphilis?—There is no test which is clinically perfect.

4405. These families from whom all your tables come were from the very lowest?—Yes, the very lowest.

4406. And you would imagine that that class in Glasgow was syphilised as a class, would you?—No, I do not think so. Although most of the bad syphilis is amongst them, I should not say they are syphilised as a class.

4407. With regard to the families you give us here where there have been a few healthy children, I suppose it is probable that those healthy children at some later period of their life would develop syphilis?—I am afraid so.

4408. You talked about the mother being compelled to submit to treatment if a case were discovered. You could not have the mother compelled to submit to treatment unless the father was also, could you?—I do not think you would have to compel the mother; I think she is always willing in the interests of her children.

4409. But it would be no good attempting to persuade her to have treatment unless you also persuaded the father?—You always save the children by treating them, and you have done the mother a great deal of good by treating her, and you have no certainty that the father will again incur syphilis. He may not. You see, the mother may go on producing syphilitic children without any fresh poison from the father.

4410. At the same time to make the thing complete, suppose notification were made compulsory, the father as well as the mother would have to be notified?—You must notify everybody.

4411. Then I gather you would look in the future to universal notification as the means for stamping out the disease?—It cannot be stamped out without that.

4412. May I ask what meaning you attach to the word "universal" there?—Everybody who has it.

4413. Everybody where?—Everybody in the country.

4414. But I was wishing to get a little further than that, because we are not segregated in this island?—You mean it might be brought from other countries?

4415. There are people going in and out of the island constantly, and we cannot treat it like hydrophobia and stamp it out in that way; so that surely if we stamp it out at home we could never hope to keep it out?—You would not be likely to go single-handed as a nation in this matter; you would have co-operation from other nations.

4416. Yes, but we have our native population in India and Africa and elsewhere which would be sources of infection always?—I think along with improved treatment you could count on that kind of infection being comparatively rare. I should like to point out that whatever virtue there may be in the newer forms of treatment by salvarsan, it has certainly shortened the infectious period a great deal.

4417. (*Sir John Collie.*) That also applies to neo-salvarsan, does it?—Yes.

4418. (*Mr. Lane.*) You say in your experience syphilis amongst the lower classes is as severe as it has

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ever been. Does that refer only to the particular classes which you are engaged in treating or to the disease in general?—I am only speaking of the manifestations as shown in those cases, which are about as bad as I can imagine for child and family life.

4419. But you do not refer to the disease in general?—I do not know of the disease outside of this. I do not know of it in its primary or secondary forms at all now.

4420. You say further that the tertiary symptoms are not so severe?—That is my impression.

4421. From that one may imply that the disease is less severe?—Or that it is better treated.

4422. The severity of the disease is always shown in the tertiary stages, or almost always?—Yes.

4423. In some of these family trees you allude to specific teeth. At what age were these teeth observed?—If you get the child after seven or eight you will often see the teeth. Very often I get the child just when the first teeth are out and the second have not come.

4424. Then in all these cases the permanent teeth are alluded to?—Yes, naturally.

4425. You say that a woman can be a transmitter of the disease although her Wassermann reaction is negative?—Although she has not symptoms, and possibly though her Wassermann reaction is negative.

4426. But she can produce a child the subject of congenital syphilis?—I think so.

4427. And she could suckle that child without any detriment to herself?—Yes, because she is protected from infection. Although she may give a negative Wassermann reaction she is immune to fresh infection.

4428. But that same child would be a danger to a wet nurse?—Might be.

4429. This is rather against a medical law, Colles Law, is it not?—Colles Law, if I remember rightly, is that the woman may transmit without herself showing symptoms of syphilis, and without being infected by her child whilst nursing the latter.

4430. Quite so; but presumably the Wassermann test must be positive in the case?—I think as a rule it is.

4431. It must be a very rare exception. You say the Wassermann test is not delicate enough for congenital syphilis?—Not for all cases of congenital deafness.

4432. Or it is too delicate for this woman who can be a transmitter?—In cases of deaf children the Wassermann reaction may fail to detect the congenital syphilis, because the process which has caused deafness has so long ceased.

4433. With regard to notification, would you notify all cases of venereal disease?—In the long run I should.

4434. You would notify cases of gonorrhœa?—I do not know whether I would or not. Gonorrhœa is a serious disease; but it is not such a serious disease as this, and yet of course the two may exist together.

4435. It is a question whether gonorrhœa is not just as severe a disease as syphilis. In the opinion of some it is?—It is not so serious a disease with regard to the symptoms I have been bringing out. It does not set up deafness and blindness.

4436. It may set up blindness?—It may set up blindness just at the time of birth, yes, but not blindness at the time we are discussing here.

4437. A very large number of cases of blindness are due to ophthalmia neonatorum?—Yes, that occurs at birth, and that is quite easily prevented if the eyes be attended to at birth, and it need not happen. This is not preventible by any such simple measure as that.

4438. Then the notification would be to the medical officer of health?—As far as I see, it should be.

4439. And the medical officer of health will approach the patient?—Or the medical attendant of the patient.

4440. Then is not this a breach of professional confidence?—I have asked this to be done under conditions which ought to preserve the interests of the patient. It is a confidential notification.

4441. We have been rather alluding to the poorer class of patient; but this notification would apply also

to the better classes, and do not you think that the better classes would object to going to a doctor if they knew that a disease such as syphilis was going to be notified?—They may at first, but I think in the long run they would help us.

4442. You think ultimately they would?—Yes, I think ultimately they would help us.

4443. It has been said that numbers of doctors would decline to reveal a secret which is conveyed to them in confidence, if they were justified?—That was said about tuberculosis.

4444. It applies much more to syphilis?—Yes, I admit it does.

4445. But you still think it would be beneficial to the public?—In the form in which I have recommended it, namely, that we do not notify syphilis by a frontal attack.

4446. But notification of disease *per se* is no advantage to anybody?—None whatever.

4447. Except to the statisticians?—Unless it is followed by treatment.

4448. Unless it is followed by compulsory treatment. Then in Denmark notification and compulsory treatment have been imposed by law; but according to Dr. Pontoppidan, compulsory treatment has always been a dead letter. He says, "A rigid enforcement of the system will only frighten patients away from medical treatment and thereby counteract its own end." Do you agree with that?—I do not know the state of matters in Denmark with regard to this. I have not read it.

4449. It is one of the few countries in which notification and compulsory treatment are imposed by law, and it does not seem to be a success there.

(Canon Horsley.) How long has that gone on for now—four years?

(Mr. Lane.) Considerably longer than that; but I cannot tell you the exact time.

(Witness.) I knew it was carried out in Denmark, but I did not know the conditions under which it was carried out.

4450-1. (Sir Almeric FitzRoy.) In stating your opinion that syphilis among the lower classes is as severe as it has ever been, is not that largely due to what, according to your own showing, is the deplorable condition of Glasgow on the score of public health?—I do not think so.

4452. But from your description of the condition of Glasgow on pages 34 and 35 of your lecture, we are justified in assuming that the condition of Glasgow on the score of public health is far worse than that of most towns?—It is the most overcrowded city in the kingdom.

4453. Just so; and you assign to overcrowding the principal cause of the fact that syphilitic disease goes untreated?—I think it is a contributing cause.

4454. And a very powerful contributing cause?—Yes. I think we are badly off in Glasgow with regard to the housing question; but although the housing question is referred to in those four lectures, I have regarded it as a question apart from the present subject.

4455. Quite so; but you mention it as a very potent cause of the syphilitic conditions of Glasgow?—My opinion is that you cannot solve this question completely as long as this state of affairs lasts.

4456. And the condition of Glasgow is far worse on that score than most people suppose it to be?—Yes, I think it is.

4457. Is rickets common in Glasgow?—Yes, but not so common as it used to be.

4458. Is that ever suspected to be of syphilitic origin?—I do not think so, but I do not know. The only link I know is that you often get tuberculosis and syphilis together. I cannot say I know of any link between rickets itself and syphilis. It may be so, but I am not acquainted with that.

4459. With regard to what you were saying about the relative responsibility of the father and mother in regard to congenital syphilis; may I ask, is it not the case that a woman sometimes acquires syphilis from a source other than her husband?—Yes, but it is not the rule.

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4460. Is it a very rare thing?—I think it is a comparatively rare thing in family life.

4461. That must only be a matter of conjecture?—Quite so.

4462. (*Sir Kenelm Digby.*) I have two questions about the question of notification. I see on page 83 of your lectures you say this: "I cannot close this lecture without an urgent appeal to this Bureau to do all in its power to procure the notification of congenital syphilis." Then on page 60 you put the point in this way, and emphasise it by putting it in italics: "by the notification of the disease"—that, I suppose, is the disease of congenital syphilis—"when it appears in the children, and by the immediate treatment of both mother and child." That is in answer to the question: "How, then, are we to prevent such deafness"? And you say by notification. I should like to ask you, do you use the word "notification" there in the same sense that it is used in the Infectious Disease Notification Act or in a different sense?—I use it in the sense that those conditions which indicate syphilis should be notified.

4463. Under the terms of this Act?—I do not know the terms of the Act.

4464. Have you not referred to the terms of the Act?—I do not think so.

4465. The Act is the same, I think, in Scotland as it is in England?—Yes.

(*Dr. Newsholme.*) Substantially so.

4466. (*Sir Kenelm Digby.*) Of course, we have to consider it from a practical point of view. We have to consider whether notification is really practicable or not?—Quite so.

4467. Reading your recommendation, I should suppose (and I want to know whether I am right in supposing it) that what you proposed was to add syphilis in this particular form, congenital syphilis, to the diseases that are to be dealt with under this Act?—Not under that name.

4468. I am not talking about the name, but the fact of disease, whatever you call it?—Yes; practically the fact must be added under the name for those separate conditions.

4469. And dealt with under this Act?—Yes.

4470. I should like to put to you the terms of this Act, and see whether by any possibility they could be applied to this case. There are two main provisions in the Act. The first is the notification before the case gets to the doctor, and secondly the notification by the medical man. Let us take those two separately. Who is to notify? The question has been asked by one or two of my colleagues?—I think the medical man must notify here.

4471. Then you would strike out the first part of this section, would you? I will just read the material points. The first person on whom the duty of the notification rests is the head of the family?—Yes.

4472. That would be hardly applicable, would it?—No, it would not be applicable.

4473. The father could not call attention to the state of his son, or his son's wife or son's children?—No, he could not do it.

4474. Then still less could the nearest relative of the patient do so?—No, it could not be done.

4475. And in default of nearest relatives, then every person in charge or in attendance on the patient is bound to take the step of communicating with the medical officer of health, which is the notification; and, lastly, if all this fails, the occupier. The occupier could hardly notify a case of this kind, could he?—Does not the doctor come in at all?

4476. He comes in later on. Now we come to the doctor. First of all, you have taken the same line as a good many other witnesses have taken, that the first thing is to get the patient to the doctor as soon as you can and begin the treatment at the very earliest stage; that you would agree to?—That is so.

4477. Then the obligation upon the doctor is this—not necessarily the doctor of the patient: "Every medical practitioner attending on or called in to visit the patient shall forthwith on becoming aware that the patient is suffering from an infectious disease to which this Act applies, send to the medical officer of

health for the district a certificate stating the name of the patient, the situation of the building, and the infectious disease from which, in the opinion of such medical practitioner, the patient is suffering." That is the obligation on the doctor. Would that at all meet this case? Your initial difficulty is to get the patient to the doctor at all—to get the doctor to know anything about it. That is the crux of the whole thing?—I do not see that there is any difficulty there, because for each of the conditions for which I have asked notification the patient is bound to go to the doctor. He cannot help himself. Miscarriages do not take place without a doctor. Meningitis must be treated by the doctor; deafness must be treated by the doctor. These are the things you notify it by.

4478. But is that the medical practitioner attending on or called in to visit? Would you say the practice of going to the doctor in these cases is so general that you could put the obligation on him?—Yes.

4479. Then, in fact, it comes to this: that you would leave altogether out of the Act, so far as it applies to this particular case, those first conditions about the head of the family and all the rest of it?—Yes, certainly, the doctor nearly does it at present.

4480. And throw the whole obligation on the doctor?—Yes, whom I would pay for doing it.

4481. I only wanted to see what you said. Still, you would have to alter this Act for this purpose, you would have to some extent to modify the Act?—Yes, probably, but hardly anybody but the doctor ever notifies now.

4482. Then it becomes a question really of what the object of this notification would be. You think it would make the doctor more careful than he was. Is that what it comes to?—It would put a power in the doctor's hand to continue treatment on the individual who was ill and his relatives, which he has not now.

4483. Would it? He notifies it to the medical officer of health, does he not?—Yes.

4484. Then it would call public attention to it in that way, and the medical officer would examine into the condition of the family, the overcrowding, and so on, and the conditions under which they live, and that would be the remedy?—Yes, that is so.

4485. I only wanted to understand your proposal. Your real proposal is that the doctor who first becomes aware of it should be under an obligation to communicate at once with the medical officer. That is what it comes to?—Yes, that is so.

4486. I see in this passage which I was reading just now, you thought when you delivered this lecture the Insurance Commissioners might give some assistance. I do not know whether you wish to say anything about that?—I do not know that I can say much about that. Perhaps you will understand that this was written before the Act was in operation.

4487. I do not want to follow that up if you do not want to?—No. I think it is quite right to state that whilst there are many parts of the Act we medical men do not like, we would rejoice in any use that can be made of the Act in the way of exterminating this infectious disease.

4488. It seemed to me there was rather a misconception, or at least we had a state of things under the Act which that paragraph does not apply to?—This was written before the Act came into operation.

4489. (*Mrs. Creighton.*) Might I ask a question bearing on that point that was just referred to?—You suggest here that maternity benefit will be claimed for dead born children and for all children who die shortly after birth, and that if the Commissioners insisted on a certificate, then the syphilitic family would be discovered. Is there anything in the present state of things which would make that impossible now? Surely the Commissioners might do that?—The only thing under the present Act is, that it does not go back quite early enough. I think the maternity benefit cannot be claimed before seven months.

4490. (*Sir John Collie.*) That is so?—I should make the benefit much earlier if I found syphilis causing miscarriage

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4491. (*Mrs. Creighton.*) Even as it is, you have dead born children after seven months?—Yes, and a large number of those are syphilitic.

4492. (*Mr. Arthur Newsholme.*) Arising out of this question of maternity benefit, quite apart from the maternity benefit is it not the fact that in Glasgow and most large towns there is notification of births, including notification of stillbirths, and that therefore it is quite practicable at the present moment to make enquiries with regard to stillbirths, and therefore with regard to syphilitic stillbirths?—I think some use might be made of that. I believe that is the case.

4493. (*Sir John Collie.*) With regard to the National Insurance Act, you are aware that the words "sanatorium benefit" have a very broad significance, and that venereal disease could as a matter of fact be treated as such?—I was not aware of that; in fact, I do not know much about the Act. I have not any work to do under it, and I do not know much about it.

4494. (*Chairman.*) With regard to the family cases which you put together, did the mothers who gave positive Wassermann reactions go for treatment when they were told by you they were infected?—I am afraid we were acting more as scientists than anything else there. We hope to perfect this, and put them all under treatment.

4495. Would all those mothers be told by you that they had better go and get treatment?—Some of them were put under treatment. All of them that came to the infirmary were put under treatment by me.

4496. You said that untreated syphilis can die out. Has it been your experience that after a sufficient lapse of time a syphilitic person untreated can become non-infective by pure lapse of time?—I think so in some cases; because it is a very variable disease both with regard to its intensity and the power of resistance of the individual and the dose the individual gets. All these things are the factors which determine the effect on the patient.

4497. Suppose the doctor discovered a case of disease due to syphilis, but that that particular patient

was not infective himself, would that have to be notified under your system?—I do not quite understand the question.

4498. Suppose the patient had a disease due to syphilis, but was not himself and was not likely to become infective and therefore not a public danger, would he have to be notified?—It would be very difficult to prove that that man could not communicate the disease, of course, if he were a married man.

4499. Take, for instance, keratitis?—Keratitis is a disease chiefly of children.

4500. General paralysis of the insane?—But the parasite is found there.

4501. Would it always be found?—Not always. It is not an infectious disease.

4502. A general paralytic could not infect?—No, but he is generally a man who is past the family stage.

4503. Therefore from the point of view of the public, he does not matter?—He does not matter so much.

4504. Therefore he need not be notified?—If he has passed the family stage I do not know why he should. He is also unlikely to have any more children.

4505. Then in taking cases for notification, would the doctor base himself on the Wassermann test alone or on clinical evidence?—Both, I fancy. If he had to choose it would be better to stick to the Wassermann test than to clinical evidence, if he had only one; but he always has them both.

4506. If he did not rely upon the Wassermann test he might make a clinical mistake and then he would get into very bad odour, would he not?—He would very likely, before he diagnosed the thing to be syphilis employ the Wassermann test to be positively sure. He would be certain with keratitis and deafness. In that case there is no doubt. Whether the Wassermann test is positive or not, that combination is syphilis.

(*Chairman.*) Thank you very much.

The witness withdrew.

THIRTEENTH DAY.

Monday, 26th January 1914.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.

(*Chairman.*)

The Right Hon. Sir DAVID BRYNMOR JONES, K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Major L. W. HARRISON called examined by the Chairman.

4507. You are the pathologist to the Royal Army Medical Hospital at Rochester Row?—I am.

4508. You have given us a statement of the kind of questions which you wished to be asked. Dealing with the first disease, what is balanitis? Is that the same thing as soft chancre?—No, balanitis is a superficial inflammation of the parts. It is not a deep inflammation. It is not an ulceration. It is more an excoriation of the parts.

4509. Is it a separate disease of a venereal character?—Yes, it is a separate disease.

4510. In addition there is soft chancre; is that a separate disease?—Yes.

4511. Are there any more of these minor diseases?—Practically none. Of course, there are venereal warts, but they usually follow on the other things.

4512. You tell us that out of 913 consecutive cases of venereal sore, 603 were proved at once, or within a short time to be syphilitic. The others, I presume, were either soft chancre or balanitis?—Yes.

4513. And they were not syphilitic in any sense?—Not as far as I know; that is by tracing their history for this period of two months. Of course, we can trace the history of all these cases afterwards, and these were followed up. I put that number in, because it used to be thought it was rather the other way

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round; that of all venereal sores you would find two non-syphilitic and one syphilitic.

4514. This is about the proportion of cases that come under you, is it?—Yes. Of course, I strictly limit it to soldiers in the London district, and I except the police, because I could not say anything about them.

4515. These other diseases are communicable in the same way as syphilis?—Yes.

4516. If untreated, do they develop anything like the serious results that we find in the case of syphilis?—No, the effect is purely local.

4517. And does it disappear without treatment, in time?—Do you mean soft chancre?

4518. Soft chancre and balanitis?—No. Soft chancre may give rise to suppurating bubo, which may be exceedingly intractable; but it is purely a personal thing.

4519. But it is communicable?—Yes, it is communicable; and in the case of a man it may be very serious locally.

4520. But neither of those diseases affects the general standard of public health so much as the other two diseases to which you refer?—No.

4521. Then you tell us, as many of the witnesses have done already, that the cause of late manifestations of syphilis is inadequate treatment. But now in the Army that has become almost impossible, has it not?—Yes.

4522. Because the man has to take treatment at an early stage?—Yes.

4523. And having once taken treatment, he is watched through his treatment from time to time, and the treatment has to be carried through to its proper results?—Yes.

4524. Then you say, "Almost all cases of late syphilis of the nervous system give a history of irregular treatment." Do I understand that that irregular treatment, as you call it there, is not now possible in the Army?—I cannot say. That depends on the medical officers and how they do their duty. But it should not be possible. There is a definite system laid down, and a man should be treated according to that system.

4525. But as regards the civil population, it is probable that irregular treatment has a great deal to do with the advance of syphilis to the later and more serious stages?—Yes, I think so.

4526. You give a series of reasons for inadequate treatment; the first being wrong or hesitating diagnosis in the first place. I understand from your later notes that there should be no such thing as wrong diagnosis at the present time, if sufficient skill and knowledge are brought to bear?—I think it should be extremely rare, at any rate.

4527. Your second cause is the failure of the medical adviser, either from lack of confidence in his own diagnosis, or from ignorance of the proper procedure, to persevere with the treatment. Does that mean that the ordinary medical adviser has not had a special training in these things, and is not sufficiently equipped with knowledge to carry on a treatment, or does not really believe in this treatment?—I think in the majority of cases it happens in this way. A patient goes to a doctor with a sore, which, clinically, is doubtful; it does not answer to the clinical description, and the doctor is uncertain about it. He communicates his uncertainty to his patient, and very often he starts treatment before he is quite certain. Later on he begins to doubt his own diagnosis, and when the patient gets bored with the treatment and comes about six months later and says, "Do you not think I have had enough of this?" the doctor, who never really believed in the diagnosis, and whose back is not strengthened by the conviction that the patient is suffering from syphilis, says, "I think you have had enough of it," and it is dropped. That is, at any rate the history I have usually had when patients have come to me with tabes, &c., I have also had cases where the doctor has said, "I do not believe it is syphilis" and in spite of a rash six weeks later, they still did not believe that the patient had syphilis. Of course, they really did not know the disease when they saw it.

4528. But, having diagnosed it, and having made up his mind that it is syphilis, would an ordinary practitioner now have sufficient knowledge of modern treatment to be able to treat it?—No, I do not think so yet. Although convinced that the patient has syphilis, they very often have to ask advice on points they should really know themselves.

4529. You now train a large number of young officers of the R.A.M.C.?—Yes.

4530. And you say they enter their profession equipped with the vaguest ideas on the pathology, diagnosis and treatment of syphilis?—That is my impression.

4531. But now every officer who comes to you goes through a sufficient course to enable him to diagnose and treat these diseases in the military hospitals in the future?—Yes, twice in his career.

4532. How long does that course take?—We divide them into two classes. We have men who are going to specialise in this class of work, and we have the ordinary men who would not come much into contact with it. They would not have it specially to treat. When the ordinary men enter, they have four mornings, or six; I am not quite sure whether it is four or six mornings that they have to spend. At any rate, they come to me about four times. I show them how to make dark ground examinations, and take blood for the Wassermann test, but I do not go into the details of the Wassermann test. I show them how to put up specimens to send to the pathologist, and show them the treatment for gonorrhœa. That is my work. Then other mornings they go and are shown how to regulate the treatment, of syphilis, how men are watched, and the whole system of observation, and the administration of salvarsan.

4533. Would such treatment as you give to those people who are not going to be specialists, suffice for the ordinary country practitioner and panel doctor?—Yes, I think so.

4534. Provided he has the institution, which we will deal with afterwards, to send his serum to for testing?—Yes, I think so; if he is willing to learn.

4535. You refer to the neglect by the patient to carry out the prescribed treatment, either from carelessness, or, too often, lack of faith in the skill or the good faith of the doctor. That means that the treatment to some extent is unpleasant, and if the patient has not confidence in it, or thinks it is doing him no good, he drops it?—Yes.

4536. But that implies that the patient has not been sufficiently frightened?—I think so very often; because I have usually found that patients I have had to deal with have been very conscientious in coming up, men who were not compelled to come up in any way. I also think that officers are very conscientious about their treatment, because we impress it upon them every time.

4537. If every man who came to a doctor was told by that doctor that he had every reason to think he had syphilis, and such a man were told the terrible results that might devolve upon him and other people, surely he would see the treatment through, or, if he were not satisfied with that treatment, he would go and take another at once?—Yes. I think if he were quite convinced that the doctor thoroughly believed in what he said—I do not think all would; but I think the great majority would continue the treatment. At any rate, a great many more would do so than at present.

4538. If the doctor took a serious line in speaking to his patient, the probability is the patient would go on with his treatment or try another?—Yes.

4539. Do you treat many people other than soldiers?—We treat the Metropolitan Police, of course.

4540. You treat the whole of the Metropolitan Police?—Yes.

4541. Do you get many cases from them?—Of course, one cannot say about the prevalence, because we limit the number of beds, so one does not know. Sometimes men are outside waiting; we cannot take them all in.

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4542. (*Sir Almeric FitzRoy.*) Are those beds generally full?—Yes. We usually have more applicants than we have beds for.

4543. (*Chairman.*) Your fourth reason is, the treatment by irregular persons, quacks, chemists and so on. Does treatment of that kind come under your personal notice?—Yes we get some particularly policemen who have been to quacks or chemists. It is not so very much with soldiers, at least, as far as we know, because we have means of detecting that kind of thing. I mean to say, if we find a man has been concealing his disease, he is liable to punishment.

4544. But is the policeman liable to no consequences if he conceals the disease?—As far as I know, not. I do not know absolutely. The penalty for contracting venereal disease in the police force is greater, I believe, than in the Army.

4545. Does that produce concealment?—I think it leads to concealment. The policeman is afraid, perhaps, that it may affect his promotion, or something of that sort. In any case, he is not as keen in reporting sick as the soldier is.

4546. Therefore he is more liable to go to the quacks?—Yes, he is more liable to go to the quacks.

4547. You lay stress upon adequate treatment being given at the earliest possible stage after the diagnosis is established, and that includes prolonged observation clinically, and by all laboratory tests until the doctor is satisfied?—Yes.

4548. That means you go on with your treatment, and with your tests, until you are satisfied the man is free and can be permitted to go out into the world again?—Yes.

4549. That, I suppose, is the ideal, as far as the civil population is concerned?—Yes.

4550. That each person should be kept under close observation until it can be said he can show a clean sheet?—Yes.

4551. At the present time the diagnosis of syphilis, you say, is as exact as that of almost any other disease. I suppose we may take it that with care, and taken in time, it is almost absolutely certain that you can say, "This is a case of syphilis"?—Yes. I think it is very rarely you would fail to diagnose it within two months, and with the vast majority you would diagnose at once, within a few minutes.

4552. Then you give us a statement of your recent methods. In the first place you take the microscopical examination of the serum from the sore itself. That, I understand, can be sent through the post, if it is packed properly?—Yes.

4553. And can be tested by any competent institution?—Yes.

4554. That you say is the only way by which a diagnosis can be made at an ideal stage for commencing treatment, and that is why it is so very important that this microscopical test should be made?—Yes; because I am quite certain at the very commencement nobody could diagnose a syphilitic sore with the naked eye. I have asked many people who have been in my laboratory to look at a sore, that I have shown them, perhaps, as big as a pin's head, and asked them if they would diagnose it as syphilis, and they have said no. But in a very few minutes the sore has been proved to be syphilitic, on microscopical examination, and that I say is the stage which is the ideal one for commencing treatment.

4555. In every case when a man comes to you with a sore, you begin by a microscopical test?—Yes, in all cases.

4556. And you say that test takes only a few minutes?—Yes.

4557. You say that in 535 out of 723 cases of primary syphilis you have made that diagnosis with satisfactory results?—Yes.

4558. Then that diagnosis may fail if the disease has been acquired for some time?—Of course the sore may have been treated with antiseptics. In a number of these 130 cases, which remain, out of these who were undoubtedly suffering from syphilis at the time of the examination, the sore was already healed up; but I still had a shot at the microscopical examination.

4559. Even after it had healed up?—Even after it had healed up; because often and often I have been able to find spirochaetes in healed sores.

4560. Then if you diagnose syphilis from the microscopical test from the material taken from a sore, you would not then go on with the Wassermann reaction at that time?—As a matter of fact, we do.

4561. When you get your diagnosis from the microscopical test that satisfied you, you would then treat that case as syphilis?—Yes, at once.

4562. And you would begin testing him by the Wassermann test?—As a matter of fact we do take the blood; but it is not for the purposes of diagnosis, it is simply to see how far the disease has gone. That is to say, there is a great deal of difference, in my opinion, in the prognosis between commencing of treatment when the Wassermann is still negative, and when it has already become positive. I might say the Wassermann reaction does not become positive in the majority of cases until about 15 days after the sore has started.

4563. In 130 of those 723 cases you found a positive Wassermann reaction, and therefore you are led to believe that the sore was more than 10 days' old?—Yes, that is so.

4564. But it might have been considerably more, of course?—It might have been 21 days old.

4565. Would you look upon it that the Wassermann reaction would not be effective if the sore had existed for less than 10 days?—A negative reaction would have practically no value whatever.

4566. Practically it amounts to this, that the Wassermann test comes in as supplementing the microscopical test, just where the microscopical test fails?—Yes.

4567. And therefore gives you a complete diagnosis?—Yes.

4568. The application of antiseptics, I suppose, would often be due to the patient consulting a quack or a chemist?—Yes. It does not happen with us; but it used to happen, that sometimes the medical officer who saw the sore originally, said: "This is not a typical Hunterian chancre; it is nothing serious; it will disappear in a few days," and he gave an antiseptic ointment. Then, later on he had a microscopical examination made when the sore did not behave as he expected.

4569. But now the antiseptic does not defeat you?—No.

4570. You go further and puncture the nearest enlarged gland, and you microscopically examine some of the gland juice?—Yes.

4571. In the remaining 58 cases, you say the Wassermann reaction became positive within two months. That, I suppose, would always happen?—Yes, practically always in syphilis.

4572. I suppose, after a period of two months from the infection, there would be no doubt the reaction would be positive?—The point I wish to bring out there is this, that a man might have a double infection; he might be infected with micro-organism which causes soft chancre, and that would start up in a few days after exposure to infection, but in the same sore there would be incubating the micro-organism of syphilis which would not show itself clinically for a variable period, we will say an average of about 21 days; so that at the time when first examined it was really a soft chancre, and later on syphilis developed in the sore. Syphilis was only incubating in the sore at the time of the microscopical examination.

4573. I did not quite realise that. Is there a specific micro-organism for soft chancre?—That is not definitely settled. Soft chancre is usually ascribed to a bacillus known as Ducey's bacillus. But some work which we have done at Rochester Row, and which has been done in America, points to other micro-organisms having something to do with soft chancre, and I do not think they are identical in their cause.

4574. It is possible that some specific organism may be discovered which would enable a diagnosis of soft chancre to be even more exact?—As a rule, of course, soft chancre is the name applied to venereal ulcerations which are not syphilitic; that is what it amounts

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to. The majority of them have been put down to Ducrey's bacillus, and it is often thought that this is the offender. But at Rochester Row we have seen another micro-organism in some soft chancres, and found no Ducrey's bacillus, and the vaccine prepared from the other micro-organism cured the case; so that it shows that there is more than one micro-organism concerned in the case of soft chancre.

4575. We have heard a great deal about the Wassermann test. Could you, in comparatively few words, give us a little idea of the process that is carried out?—As carried out on the original principle, a specimen of blood is removed from the patient, and that separates out into clot and clear serum. We remove the clear serum, and that is tested. That clear serum contains some natural complement which, before the test, is removed by heating the serum. Then the serum is ready for testing. The principle of the test is this. If you put a syphilitic serum in contact with an extract of any organ, an alcoholic extract, and a substance which is present in every fresh serum known as complement, the complement is inactivated—it is put out of action. The way you ascertain the complement is out of action is by adding to the mixture, after you have incubated it a certain length of time, a re-agent which will detect the presence of free complement. That re-agent which you add is a mixture of blood cells to which has been added a serum which is antagonistic to those blood cells. That substance is known as the hemolytic anti-serum. As a rule, it is rabbit serum prepared by injecting a rabbit a number of times with sheep's blood cells, bleeding the rabbit and removing its serum, and removing the natural complement. Then you mix this antagonistic rabbit serum in with the sheep's blood cells, and it only then requires complement to produce solution of the cells. That is to say, when you have these three substances together, the sheep's cells, the anti-sheep cells serum, and the complement, the mixture becomes quite clear, we will say like a mixture of red ink. If you had not the complement present, the mixture would remain quite turbid, and the cells sink to the bottom. That is your re-agent. In other words, your re-agent is a mixture which only requires complement to behave in a certain way. You then have to see whether the complement has been inactivated or not. You add a mixture of sheep cells and anti-sheep cells serum to your mixture of patient's serum, extract of organ and complement, which is usually got from guinea pigs. If the complement is bound, nothing happens to the sheep's cells. If the complement is left free, the sheep's cells are dissolved. It is rather involved.

4576. No, it makes it perfectly clear. Then it really depends on the fixation of complement?—It depends on the fixation of complement when the syphilitic serum is put in contact with an alcoholic extract of almost any organ.

4577. If you carry out this test, you have thoroughly standardised it now, and brought it to a regular system, so that your comparative results can be trusted. But do you think the Wassermann test as carried out by anybody will give us results which are directly and properly comparative with yours?—It depends on the system. There are a certain number of so-called Wassermann tests which are really simplified tests. Instead of obtaining the complement from one animal, they depend for instance on the complement which is present in the patient's own serum. That introduces a variable, because one patient's serum contains a certain amount of complement and another patient's serum contains another, and still another, a different amount of complement, and so on; so that you have not your tests under exactly comparable conditions, and I think that leads to fallacies. Different persons' complements behave very differently. For instance, I have tested sera which have come from Cairo, and the complement has been present in the serum, and they have given a negative reaction to a modification which I always do use in addition to the original test. On the other hand, another patient's serum might show no complement the next day, and I do not see how you

could possibly have reliable results when you have variables in your serum when making your test.

4578. If you were presented with a number of statistics of Wassermann tests, you would want to know who did them, and the method he adopted?—Yes.

4579. As regards these short-cut methods you have alluded to, would the effect be to make the test less sensitive, or more sensitive?—As a rule it is more sensitive.

4580. Therefore the tendency would be to exaggerate?—The tendency is to exaggerate. But I might say that the original test is being improved daily, and I think myself now the original test can safely be made as delicate as any modification. But that was not so even only a year ago.

4581. Then as matters now stand, if there were central Government establishments for making these tests, there would be no difficulty in laying down a completely accurate and trustworthy system?—No, I do not think there would be any difficulty.

4582. Then you allude to the examination of the cerebro-spinal fluid by the Wassermann and other tests. In what cases do you require to make examination of that fluid?—I think myself that the cerebro-spinal fluid ought to be examined rather more frequently than it is at present. But in all cases presenting symptoms of disease of the nervous system, we always examine the cerebro-spinal fluid.

4583. In those cases would the examination of the blood serum be delusive?—It might. I had a case the other day. I might say the blood of the patient had been tested also in New York; the specimen was split. They got a negative, and I got a negative from the blood serum. We tested his cerebro-spinal fluid and it gave a positive.

4584. What would that mean?—It meant this, that if we had relied entirely on the blood test and had repeated negative examinations, we might have put syphills out of court in the diagnosis. As a matter of fact he was really thought by some people to be suffering from neurasthenia; but the examination of the cerebro-spinal fluid showed distinctly that he was suffering from syphilis of the central nervous system. Of course the necessary treatment was applied with excellent results.

4585. If that had not been done, there would have been no means of knowing what was the proper treatment to give?—If it had not been done it might have been a matter of divided opinion, and perhaps the course of treatment which was laid down would not have been laid down so certainly and definitely as it was when we had this piece of evidence from his cerebro-spinal fluid. In other words it fortified everybody in his therapeutic measures.

4586. Unless there are nervous or medical symptoms in ordinary cases, you would not find it necessary to make this medical examination?—No; I do not think it would be quite practicable to apply it to all cases.

4587. Turning now to gonorrhoea, you say the treatment is notoriously unsatisfactory, but the chief reason for that is because the patient almost always presents himself for treatment when the micro-organism is already deeply embedded in the tissues. Have you to deal much with gonorrhoea amongst soldiers?—Yes. Of course, gonorrhoea is much more prevalent in the Army than syphilis.

4588. As regards the soldier, do you generally get him when this micro-organism has deeply embedded itself?—Yes.

4589. And getting rather too late, as a rule?—Yes, getting too late as a rule.

4590. Because he does not recognise he has the disease?—He pays no attention to the first signs, and by the time he comes up he already has a purulent discharge, and that is an indication generally that the disease is well established.

4591. I think we were told by one witness that a man must know almost immediately if he has the disease from certain symptoms one discovers, and therefore it is only a question of ignorance if he postpones getting treatment which might save him from further trouble?—It is largely ignorance. I

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think better knowledge on this subject would lead to better results in the treatment.

4592. You have come to the conclusion that if gonorrhœa is attacked within 48 hours of exposure to infection the disease would not obtain any foothold. That is very important. If known you mean?—Yes, if known.

4593. As continuing the disease in the individual, and perhaps his passing it on to other people. Can you now say that you can diagnose gonorrhœa at almost any stage?—No, I do not think you can. I think the complement deviation test is a very delicate one, but I cannot say how delicate it is at present. In the early stages, of course, it is easier. You can diagnose it by microscopical examination; but it is in the later stages, when the disease is almost completely latent and microscopical examination is of very little value, that I think this complement deviation test, which is very much on the same principle as the Wassermann test, only you use an extract of gonococci, is useful.

4594. Is there any form of the disease of which the gonococcus is the cause, which lies so completely latent that there are no other symptoms in the individual at all, and yet that individual may be dangerously infective?—Yes. For instance, you have a case which repeatedly happens, a patient who has shown no symptoms—no urethral discharge at all—who suddenly develops an attack of epididymitis. Of course that is a clear indication that the gonococci are in his testicle, and the chances of infection must be very great.

4595. Therefore, from what you say, one must regard gonorrhœa as a peculiarly insidious and dangerous disease, having regard to public health?—Yes.

4596. You mention four different kinds of tests for diagnosing the disease; but you say, in spite of all those tests, it may be so latent in the system that you do not discover it?—You cannot be absolutely certain. I think with this last test, No. 4, if it is carefully carried out you could be almost certain, but I cannot say definitely.

4597. First of all you say, "repeated examinations of secretion expressed from the prostate and urethral glands." That is an examination to find the gonococcus?—Yes.

4598. Then an examination of any threads in the urine. That is for the same purpose, I suppose?—Yes.

4599. Then test doses of vaccine. Will you explain what that is?—You give the patient a large dose of vaccine.

4600. What vaccine?—Gonococcus vaccine. The idea is that his tissues have been sensitised by the long residence of the gonococcus in them. He has become sensitised, and he responds by a reaction to this test dose of vaccine; that is to say, he may have a large local reaction at the place where the vaccine was injected, a slight rise of temperature or an increase of discharge, if it were there before, or the reappearance of a discharge which has been abated for some time. That I have found to act in a certain proportion of cases, but I cannot say it is invariable.

4601. Then your fourth test is the blood serum?—Yes.

4602. And even that may evade you?—Yes.

4603. But in ordinary cases that have not gone too far, would the gonococcus be present, as a rule, in the blood serum?—This is a test which is more applicable to the later stages. It is a test of the blood serum for the complement deviation. In the early stages it is not so often positive; it is not so constantly positive as in the later stages.

4604. Now we come to the question of prophylaxis. You say with regard to the education of practitioners in the treatment, that the subject of venereal diseases should be part of the medical curriculum and should be thoroughly taught, and a high standard of knowledge required at examinations. In that you mean the book part of it?—Yes, and the practical side.

4605. As a matter of fact, there are not enough hospitals at present where there is sufficient treatment of venereal diseases going on to give the young

medical students the opportunity of a practical observation of work they ought to do?—I think so.

4606. This education could not be given with the present material probably?—I believe that is so.

4607. But you think that is necessary for all general practitioners?—Yes.

4608. Then for the education of the public in these diseases, you think it should be included in a general education of the community on the prevention of disease generally?—Yes. For instance, schoolboys could be taught personal hygiene. Lots of boys leave school and do not know how to protect themselves against such a disease as typhoid fever, and I think it would be a very useful thing to teach them personal hygiene and protection against all infectious diseases, and this one could be included.

4609. Even for boys, you think it would be desirable to include in your course of hygiene these diseases?—Yes, I think so. I think the prophylaxis of all infectious diseases ought to be taught to school-boys.

4610. And you think better knowledge on the part of the public would lead to a demand in some classes for a higher standard of health on marriage?—Yes, I think so.

4611. What classes do you refer to?—I think the more educated classes.

4612. The more highly educated classes?—Yes.

4613. What about the age of the boy to whom you would give this instruction?—Boys just about to leave school.

4614. (*Rev. Scott Lidgett.*) Elementary schools, or secondary schools where they leave at a later age?—Secondary schools; boys going out into the world.

4615. What would you do about elementary school children who leave at 14 or 15?—I think they could be taught that too.

4616. At that age?—At that age.

4617. (*Chairman.*) You would rather teach them at that age than not teach them at all?—I would rather teach them. I think boys ought to know these things.

4618. If you cannot get the boy at a later age, you would teach him as early as 14?—Yes.

4619. Then we come to legislation dealing with the prevention of chemists and other irregular persons treating gonorrhœa and other venereal sores. I suppose you know that is a most difficult question to deal with?—Yes.

4620. Have you formed any idea how this prevention could be carried out?—If a chemist treats a person for venereal diseases, or at least one of these more severe venereal diseases, sooner or later it must come out and the patient must resort to a doctor. Then he has only to say "I went to so-and-so, who treated me when I had a urethral discharge, or a venereal sore," and of course if there is a law forbidding such things the chemist would be liable.

4621. You would make the competent medical practitioner report his incompetent and irregular rival?—Yes.

4622. Would you make it penal to treat or advertise treatment of an irregular character?—Yes, I would.

4623. Do you know much yourself about the way in which advertisements are resorted to by these people?—No. I know this, that venereal sores which are often syphilitic have been treated with caustics, and no internal treatment has been given.

4624. Would you prohibit advertisements intended to draw people to these quacks?—Yes.

4625. Here is an advertisement in Bradshaw, which reads as follows (*reading the advertisement*). That is all. Does that mean, do you think, that he deals with it?—I should have that man up.

4626. Do you think he deals with it?—I think it is very obvious.

4627. (*Sir John Collie.*) What disease it is aiming at?—Gonorrhœa.

4628. (*Chairman.*) I think so. There is no hint there which could be dealt with legally?—But it is very obviously a hint to everybody.

4629. Now I come to the question of notification. You propose confidential notification at the option of

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the local council. How do you propose to work that?—I think it might be a matter of communication between the patient's medical adviser and the medical officer of health directly.

4630. That the medical officer, as soon as he has diagnosed a case, ought to report it confidentially to the medical officer of health?—Yes.

4631. But you would make that power optional to each local area?—Yes, because I think the conditions vary in different local areas. It might work in one district and not work in another. I cannot see how it would work in London, for instance.

4632. Do you think it would not work in London?—I cannot see at present how it would work in London, but it might in a smaller town.

4633. But if we are to do any good, London is one of the places where it should be tried, is it not?—At first I think the local authorities would gather experience better by starting a thing like this in smaller towns, and it could be extended, I think, later to bigger and bigger towns.

4634. You would leave it to the county or borough councils to decide as to their area?—Yes, whether the local conditions would allow of it being applied.

4635. You are not afraid that anything of this sort would lead to worse concealment than at present exists?—No, I do not think so, so long as you do not put it in the hands of subordinates. If you keep it in the hands of doctors, then it will be all right. I think if you allow names to go through the hands of subordinates and the patients get to know of it, they will probably conceal their disease; but so long as they knew, and they were absolutely convinced that their names remained entirely in the hands of medical practitioners, who are of course under an oath not to disclose these things, then I think they would not conceal it.

4636. You think in time they would gain confidence in the measure of secrecy?—Yes.

4637. Then you say, the Cantonment Code in India is a success where it is worked on this principle. That means the voluntary principle, I suppose?—That is so.

4638. You mean primary notification?—I put in that to get into touch with diseased women. There is a rough kind of notification, or at least there was, when I was in India.

4639. There is still?—When a soldier was admitted to hospital with a venereal disease, he was asked if he could recognise the source of infection, and he went down to the bazaar if it were there. Then it was the duty of the medical officer in charge of the cantonment hospital to see the woman and settle whether she was the source of this man's disease or not. Of course the medical officer in charge of the cantonment hospital comes a good deal into contact with these women, and he can do a good deal in the way of educating them. I was in charge of a cantonment hospital in Sialkote, and without any force or tyranny of any description, we absolutely reduced the venereal disease which originated in the bazaar to nothing. Of course there was still the irregular roadside infection, but that was not very great.

4640. It depends on the way the medical officers work it?—Entirely.

4641. And you think if it is brought in as a matter of compulsion with police aid, it is a failure?—If you put police compulsion first, I am quite sure you will have tyranny.

4642. Then you deal with the National Laboratory Service. I suppose you have not formed any estimate of the cost of the scheme?—No, I cannot say I have. I was simply concerned with the necessity of it.

4643. What you wish to bring out is the necessity of some national laboratory service to carry out this work we have been discussing; that is all?—Yes.

4644. Would you have this national laboratory service to deal with other diseases than venereal diseases?—Yes.

4645. Tuberculosis and all those things?—Yes. I think it could all be run together. I think there will very soon be a demand for local laboratories, and that

sooner or later it must be satisfied, and it might as well be satisfied sooner as later.

4646. I suppose you know that under the Insurance Act a large sum of money is provided for research work of this kind. I do not think it was intended in the Acts specially to apply to venereal diseases, but there is no reason that it should not be so applied?—No. I have a note here. I thought that a scheme like this would benefit three classes of people, the public health authority, people who are insured, and the private individuals who could pay a moderate fee, and the costs might be shared amongst them.

4647. This would be purely a State service?—A State service.

4648. Then I suppose it would be economical to have large laboratories rather than a number of small ones. It is cheaper, is it not, to deal with these matters on a large scale?—Yes, so long as you do not take the laboratory too far away from the patient.

4649. What would be the limit of distance? I suppose a 24 hours' post would not be too long, would it?—As I have said here, if you have county laboratories, they would do for post specimens and that kind of thing.

4650. Yes; but to have a laboratory in each county would be rather a large order, and it is a question whether fewer of these, at all events at first, should be provided, so long as the distance was not so great, that the material was injured in any way with transit?—With regard to this unit I have put down, to my mind that was a thing which was applicable to a district with about 50,000 people. I know it would cost a lot of money; but I think this local laboratory would be immensely useful, not merely for venereal work, but for all kinds of work—blood examinations and so on.

4651. All diseases?—Yes, all diseases.

4652. You have not formed any estimate of the number of tests that one of these county laboratories would have to perform?—No; I think myself they would do very much the kind of work that I do in my own laboratory.

4653. Then you think that the county or county borough laboratories which do exist in some cases, but which do not undertake anything like the tests required for venereal diseases, could be brought into this work and supplemented and strengthened?—Yes.

4654. You propose to utilise these institutions for the advantage of the medical practitioner, and in consideration of those advantages to impose certain duties upon him?—Yes.

4655. What advantages will he have?—He would be helped in his diagnosis. I think it is an advantage to a practitioner to have the assistance of a bacteriologist, and in a number of cases now the practitioner cannot avail himself of the services of a bacteriologist because the cost is too great. Say a practitioner wants a blood examination made. If the patient cannot afford it, he cannot have it. That blood examination might be of the greatest assistance to the practitioner in making a diagnosis; or he might want the sputum examined for tubercle bacilli. He has practically no facilities at present. I know when I visit practitioners, they always get me to do a little work of this kind for them.

4656. Then you would do all that work for nothing, and on the strength of it expect him to keep a private register of the patients under treatment, a sort of history sheet of them, and to send specimens to the local bacteriologist?—Yes.

4657. So that these institutions would also form a sort of statistical bureau for the disease?—Yes.

4658. Then you think as to the instruction of the practitioners, that that is as necessary as the establishment of these institutions?—Exactly.

4659. He must be instructed so far as to be able to do everything that the institution could not do for him at a distance?—Quite so.

4660. And above all he ought to have knowledge enough to instruct the patients suffering from these diseases as to all the necessary treatment and so on?—Yes.

4661. Have you any experience of Noguchi's luetin test?—Yes, I have done a number of luetin tests. Of

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course, it is more applicable to the later stages. I do not think it is yet decided whether it is a valuable test of cure, or whether it is any better than a number of Wassermann tests after a provocative dose of salvarsan.

4662. Is it simpler?—No, it is not. It involves the injection into the skin of each arm of a certain solution, or rather mixture, in one case of extract of dead *spirochaeta pallida*, and in the other an emulsion of the same kind of culture medium as that in which the pallida grew. I did about 80 with controls, and it certainly came off only in syphilitic cases, except in one instance, in which case a perfectly normal person gave what is known as a Noguchi torpid reaction; that is to say, a reaction where apparently everything is quite normal, then about 10 days afterwards a postule appears. I do not believe in Noguchi's torpid reaction, but as far as my tests are concerned, in the case of the other two types of luctin reaction, I think it is specific. As to its exact value in deciding whether a patient is cured or not, I am not prepared to say.

4663. In any case, it only does what you are satisfied the Wassermann test can do at least as well?—As far as we know at present.

4664. Is it your experience from the large number of tests you have made, that the Wassermann test is over delicate or that it may over estimate results by not being sufficiently delicate?—Of course, with regard to the test, according to the original principle—

4665. I mean that?—If you exclude certain diseases which are quite easily excluded clinically, then I think it is absolutely specific to syphilis.

4666. It might possibly miss?—It might miss easily.

4667. But it would never record where there was no trace of syphilitic disease?—Not if you exclude a given number of diseases which are easily excluded clinically.

4668. Which you can exclude by observation?—Yes.

4669. (*Sir David Brynmor Jones.*) I understand you are at Rochester Row?—Yes, I am pathologist there, and I have also charge of cases of gonorrhœa. My main duty is pathologist.

4670. Can you tell us whether any of the patients who go for treatment to Rochester Row are persons who were infected with syphilis or gonorrhœa and had either of those diseases before they entered the Army?—A certain number, but a very small proportion. I cannot tell you exactly the proportion, but it is a very small proportion indeed.

4671. So that most of the men come to you when there is a primary sore, or when the symptoms are comparatively recent?—Yes.

4672. How long have you been at Rochester Row?—I went there in September 1909, so I have been there 4½ years.

4673. We have been told that there is a system of lectures introduced into the Army and delivered to private soldiers?—Yes.

4674. From your observation do you think those lectures have done any good?—I cannot say, because of course, I am not in charge of statistics, and I cannot tell without looking up the proportion of admissions to total troops.

4675. That is to say, so far as you know, about the same number of men come to you as before?—It is impossible to say that, because of course one does one's day's work and one does not notice; perhaps one goes the whole of ten days without seeing a venereal sore for instance, and then there is a little rush. It is impossible to keep count in one's head of the number of admissions.

4676. Some of the patients have to go into beds, do they not?—Yes; on admission, of course, all gonorrhœal cases go to bed, and all cases of severe venereal sore.

4677. Are the beds generally fully occupied?—No; except in the ward for gonorrhœal patients and that is pretty fully occupied. The wards for venereal sores and for syphilis are by no means fully occupied, but that we put down a good deal to the effect of the salvarsan treatment. It has emptied the

wards of a lot of cases who were previously there for intractable lesions of syphilis.

4678. According to your experience, when did that treatment first come in?—We started it in September 1910; I think that was the first occasion.

4679. Then one of the effects of that new treatment has been that your beds are not so fully occupied as they were before?—Exactly.

4680. With regard to the ward for the Metropolitan Police, are you acquainted with the relations between the Metropolitan Police and your institution? What are the rights of the Commissioner or the police as a body in that matter?—We have no wards specially for the Metropolitan Police. We keep a certain number of beds and the police are admitted up to a certain number, but we do not admit every police patient at the present time. Of course, the arrangements are not on a very satisfactory footing. When a policeman is suffering from venereal disease the authorities apply to us whether we have a bed vacant; if we have we take him in.

4681. In every police district there is a police surgeon?—Yes.

4682. Would you attend a constable if he came to you, without the intervention of the district surgeon at all?—No. He is sent in by the surgeon with a report signed by the district surgeon.

4683. Then the system is, that a constable, if he has the courage to go to the divisional surgeon, may be passed on to you if he is a bad case?—Yes. What we have tried to do is this. We have not, as I said, sufficient beds to take in all police candidates. But we have asked divisional surgeons to send all cases of venereal sore to us in the first place, so that we can make a microscopical examination of the sore. Whether the patients could be taken or not depends, of course, upon the number of beds. But we have asked them to send every case to us at once for diagnosis by the microscope.

4684. Have you any reason to suppose that a constable who becomes infected is nervous about going to the divisional surgeon for treatment?—I think they are. They have an idea that it may affect their promotion, and, of course, it costs them more.

4685. It costs them more?—Yes, they have to pay hospital stoppages of course, and have to pay more than a soldier has to pay.

4686. You were good enough to describe what I understood to be what we have called the Wassermann test. Did I gather that rightly?—Yes.

4687. Supposing he had the apparatus, do you think a general practitioner with the ordinary qualifications would, at the present time, be able to carry out the test?—No, I do not think so, without a good deal of trouble, unless he was specially qualified or interested in the test. Then, too, he requires fresh guinea-pig serum, and you cannot have every practitioner slaying guinea-pigs about once a week.

4688. Would it be worth while to encourage that kind of skill in the case of the general practitioner, or to relegate all that kind of work to experts?—Yes, the Wassermann test ought certainly to be centralised.

4689. It really hardly comes within the range of the science or art of medicine; it is rather the art or science of bio-chemistry, is it not, or some special department of knowledge?—Yes; it is a very special work, and it is better it should be done by a specialist rather than by a number of half-trained people.

4690. I see in the scheme you have been good enough to send in, you do mention in detail the minimum equipment required?—Yes.

4691. The incubator, the microscope, and so on?—Yes.

4692. What is the cost of the ordinary apparatus of reasonably good quality?—A microscope would be 23l. 10s., an incubator about 7l. 10s., a centrifugal machine about 30s. I suppose this set of kit would cost between 50l. and 60l. Of course, I should have to consult catalogues to be quite certain.

4693. With regard to the general scheme, of which you have given us a very clear outline, have you thought how the expense ought to be met?—Have you any suggestions to offer as to that?—This scheme

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seems to affect three classes of people: the people who are insured under the National Health Insurance Act, the Public Health Authorities who are interested in the examination of diphtheria swabs and such like things, and I thought patients of a higher class than the insured who are able to pay a moderate fee. I thought the cost might be borne between these various authorities and supplemented by moderate fees on a definite scale.

4694. That means partly out of the rates and partly out of charges made to individuals who take advantage of the system?—Yes. I believe a certain amount of the insurance premium is intended for some work of this kind, and I should like to suggest that the Insurance Medical Commissioner might give a good deal of information on this point as to ways and means.

4695. But as I gather from the scheme which I have in my hand, it means a good deal of capital expenditure for the providing of laboratories in the various counties and districts?—Of course, in smaller districts where laboratories are not at present, that would need a good deal of capital expenditure. But there is a certain number of municipal laboratories and county laboratories. Those need only be extended and supplemented. Their equipment is already there. The medical officer of health of a large borough has a laboratory and that need only be extended.

4696. With regard to chemists and so forth, have you any suggestions to make as to the amendment of the existing Acts, the Apothecaries Act, and so on?—I should like to make it penal for a chemist or other unregistered person to treat a venereal sore or urethral discharge.

4697. Is it within your knowledge that an ordinary respectable chemist in a country town, whose shop is situate in a good street, would treat a man who goes in there suffering from a venereal sore? Does such a chemist ever treat it?—I cannot say in an ordinary country town; but I have had a number of patients who have told me they have been to a chemist who has treated them in London. Of course, one knows there is a lot of counter prescribing.

4698. (*Sir Kenelm Digby.*) With regard to your relations with the Metropolitan Police, are there any rules or have you anything in writing at all defining those relations?—No. Of course, I am not concerned with that part of the work, really. As far as I know, the police are admitted by arrangement with the officer in charge of the hospital, and they pay 2s. a day hospital stoppages.

4699. Is that paid by the constable, or does it come out of the Police Fund?—I think it comes out of the man's pocket.

4700. Do you know how long that arrangement has been in existence?—No, I cannot say absolutely.

4701. That has been in force ever since you had any connection with Rochester Row?—Yes, ever since I had any connection with Rochester Row. The penalty to a policeman for contracting venereal disease used to be much more severe than it is at present.

4702. It used to be?—It used to be; but we represented to the police authorities that that led to concealment of disease and they modified the penalty.

4703. When was that done; can you tell me at all?—I cannot tell you. It is two or three years ago, I think.

4704. In consequence of the representations made to them, the police authorities modified it?—Yes.

4705. Do you know at all what the position is now? In other words, do the men disclose the disease now, do you think?—I think they do more now.

4706. When they come to you, is the disease generally in the early stages or the later?—Unfortunately, it is very often in the later stages. One very rarely sees a policeman at such an early stage as one sees the soldier. The rule with the soldier almost invariably is very early syphilis.

4707. I suppose we shall be able to get that from the police authorities. But do you know at all whether there is any rule of discipline—it is a highly

disciplined force of course—as in the Army, that they must disclose it?—I cannot say as to that.

4708. At any rate, as far as you know there is somewhat of a regrettable delay in the cases being brought forward?—Yes. Whether they have good reason or not, the fact is they do not report sick so early as the soldier.

4709. I suppose their proper course is to report it to their divisional surgeon?—Yes.

4710. Is it the practice for the divisional surgeon to send the case on to Rochester Row as soon as possible?—As a general rule, if he thinks it is a case for hospital treatment, he applies through the telephone for a bed.

4711. If a man goes to him and he finds he is suffering in this way, is it the regular course for him to say at once, "Go across to Rochester Row"?—No, I cannot say; I do not think it is.

4712. That is what you wish to encourage him to do?—We cannot, of course, take in every policeman who contracts venereal disease, but as a purely voluntary act on our part we have offered to examine every policeman who reports sick to the divisional surgeon. The divisional surgeon is perfectly free to send that man to us for diagnosis of his case in the laboratory.

4713. Whether you can give him a bed or not?—Whether we will admit him or not is another matter.

4714. But you are always ready and willing to take him for diagnosis?—We are always anxious for him to come to us.

4715. I suppose you would indicate to the divisional surgeon the treatment required?—Yes. If we make a diagnosis of syphilis in that way, we make every effort to start the man's treatment at Rochester Row, even if we have to detain him for a few days.

4716. Is there any difficulty in detaining him? Supposing you have plenty of room and you have a case which, if it were a soldier, would be detained until cured, have you more difficulty in detaining a policeman?—No. Of course, the authorities would allow us to detain any policeman, or send him up on our recommendation. There is a little difficulty in this way; that the military authorities lose financially if a policeman, for shortage of beds, is detained for only three days. The drug costs more, and if he is detained three days we only recover 6s.

4717. Can you give us any idea as to the number of cases you have? The Metropolitan Police Force consists of something like 16,000 men. Taking 16,000 men, or 17,000, very likely now, all told, would you have any large proportion of them?—It is impossible for me to say, because not all cases come to us.

(*Chairman.*) I should hope we should get this from the police witnesses. I do not think the witness could possibly know.

4718. (*Sir Kenelm Digby.*) No. I only wanted to know how many came to Rochester Row?—I do not think any information that I could give in that way would be of any use whatever. I cannot say how many are kept back by the divisional surgeons.

4719. I will not ask you anything more, except as to the actual number that you know?—Then I could only trust to my memory, of course.

4720. Do you treat many officers at Rochester Row as well as men?—Yes, a fair number.

4721. I mean is it the practice for an officer to come to Rochester Row, or would he go to his own medical man?—Officers come; a good deal to Rochester Row from all over. When they land home from India, and so on, they come straight up. But we have not a very great number, considering how many stations they seem to come from.

4722. They appreciate the importance of coming?—Yes, they do; but there is not a great number. Of course they come from all over. In cases of difficulty they often come up to town to consult us, and in a way Rochester Row has developed into a consulting department. It has developed on those lines more particularly in recent years.

4723. Do they remain for treatment?—No, we have no beds for officers.

4724. You have spoken of microscopic tests, and that a microscope costs about 22l. 10s.?—Yes.

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4725. That is not a very high powered instrument, is it, nothing like what we heard about the other day for magnifying?—It would do the ordinary work.

4726. (*Dr. Mott.*) You would have a good oil immersion for that?—Yes, a good oil immersion.

4727. (*Sir Kenelm Digby.*) That is quite enough?—That is quite enough.

4728. With regard to this question of education, you think it might be given to some extent at school?—Yes; I would not focus attention on this one thing. I think it should be included in a course on personal hygiene.

4729. It is a little peculiar subject to teach at school?—Yes.

4730. If a lecture were desired, would you have it given by the ordinary staff or by a professional man?—I think the school doctor is the person—a professional man, I think.

4731. Are you a public school man yourself, may I ask?—Yes, I am.

4732. Do you think it would be easy to teach it in classes at all? Do you not think, however the teaching is given, it would be better given individually, or, at all events, in very small classes?—In very small classes.

4733. One knows what the difficulty of teaching a large class is?—Yes. I think it should be a very small class.

4734. One word about this scheme of national district laboratories. I suppose district laboratories would be a very essential feature of your scheme?—Yes, that is the unit.

4735. I mean, just as you have insurance committees, and so on, spread all over the country, we must, to bring this home to the people generally, make use of the district organisation, whatever it is?—Yes.

4736. You must bring in various centres?—Yes.

4737. You might have State aid; but you must, surely, bring in the various sub-centres all over the country?—Yes.

4738. That is part of your scheme?—Yes; that is the idea; to bring it as close as possible to the patient, so that you can send the patient to the laboratory, or a specimen to the laboratory with the least difficulty.

4739. There is one passage in your proof that I should rather like to get on the shorthand notes in the form in which it is stated here. You speak of the ideal stage for commencing treatment, namely, the very earliest, and then you speak of a diagnosis of 723 cases. Were those consecutive cases, taken one after the other, or were they picked cases?—No. I got these figures by going through the register, taking one case after the other.

4740. Just as they came in their order?—Yes, exactly as they came in their order.

4741. Out of these 723 cases, 535 were cases of primary syphilis, and in 130 out of the remainder the Wassermann reaction was already positive, showing that the sore was, in all probability, more than 10 days old, and in the great majority of them an antiseptic had been applied driving the spirochaetes to the deeper tissues. That is a mischievous result, is it not?—It is mischievous only from the point of view of diagnosis, if they were in the deeper tissues, it would be difficult to get them into the serum which may exude from the sore, and they would not appear in the microscopic specimen. As a matter of fact, there are already spirochaetes in the deeper tissues. It is quite possible it did not drive them to the deeper tissues, but slew those on the surface. The main result is that you do not get them in the microscopic specimen.

4742. The main importance of this is as showing the enormous importance of seeing what the mischief is at the very earliest stages?—Exactly.

4743. (*Sir Almeric FitzRoy.*) I want to ask one or two questions about the alleged inadequacy of medical education, because, at the last resort, it is a matter that might come before me in connection with my official position. You say that medical education on this subject is deficient?—I think so.

4744. May I not say that the standard of medical education represents the conditions of examination

maintained by the bodies whose diploma gives the right to practice?—Yes.

4745. That is the standard of medical education, is it not?—Yes.

4746. Am I to understand that, in your opinion, these bodies have neglected their duty?—No.

4747. That is to say, the great licensing corporations and the universities?—I think the importance of this has not been brought sufficiently to their notice.

4748. But should it not be recognisable if these bodies are up to the standard of modern enlightenment?—It is quite possible that other things appeal to them as being more important.

4749. You think it is merely a lack of the sense of proportion?—It may be a lack of the sense of proportion. For instance, I believe now a very intimate knowledge of anatomy is considered necessary, and the student, to obtain his qualification, has to carry an enormous load, and I expect these bodies really do not know how they can possibly increase that load.

4750. To go a step further, is not the General Medical Council, under the Medical Acts, charged with the duty of bringing these bodies up to the mark? Are you acquainted with the sections in the Medical Act dealing with that point?—I am afraid I have not read them.

4751. I am speaking in the presence of a distinguished member of the General Medical Council. Taking the Act of 1858 first, it is provided: "In case it appears to the General Medical Council that the course of study and examinations gone through in order to obtain any such qualifications"—that is the qualification for registration under the Act?—Yes.

4752. "Any college or body, are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge, skill, and efficient practice of their profession; it shall be lawful for the General Medical Council to represent the same to His Majesty's Most Honourable Privy Council." The section of the Act of 1886 which I will not trouble you by reading, is very much on the same lines. That gives the General Medical Council the direct responsibility, does it not?—Yes. Then of course it comes to be a matter of opinion as to what they consider is requisite training to equip a man with knowledge for the practice of his profession; and this contained here is a suggestion of mine. The General Medical Council might not agree with it. They might say it is impracticable to include it. It is purely a matter of opinion.

4753. You do not go so far as to include the General Medical Council in your complaint?—No.

(*Dr. Mott.*) Shall I be in order as Examiner at the University of Cambridge and the Joint Board of the Colleges, in saying a word in regard to this matter, my Lord. The spirochaete upon which Major Harrison laid stress in his diagnosis, has only been discovered a few years, and it takes time before we can examine students on a subject like that. At the last examination at Cambridge I showed every man who came up a spirochaete under the microscope, and made them make film preparations; and at the Conjoint Board also to every candidate who came before me, I said "Now you are examined on it, we shall know you are taught the subject."

(*Sir Almeric FitzRoy.*) I want to clear the medical authorities from any implicit charge of neglect.

(*Dr. Mott.*) So really the reason is the short time. If you will remember, I asked the naval authority who came before us that very question.

4754. (*Sir Almeric FitzRoy.*) One thing further I wanted to ask you, with regard to your idea—which I think is a very valuable one—of preventing illicit or, we will call it, unqualified practice in connection with these maladies. Would not it be very difficult very often to bring home to the chemist or other unqualified practitioner his responsibility after the case had come to the doctor? Some time might have elapsed, to begin with?—Yes, and of course you would have difficulty in getting the patient's evidence. But if it was obvious to the doctor that the patient had been treated by a chemist or other unqualified person whilst he was

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suffering from a venereal sore or urethral discharge, I should say that would be sufficient.

4755. (*Dr. Newsholme.*) How is he to know it is a venereal sore—it brings out your point, sir—and not an accidental wound? He might say it was an accidental wound?—I would forbid him to treat any lesion whatever.

4756. (*Sir Almeric FitzRoy.*) You would cover it in that way. Whatever difficulties might arise in that connection, I suppose you would agree that legislation penalising the practice of unqualified persons treating these diseases, would at once check all advertisements intended to attract patients?—Yes.

4757. And that is one of the most noxious forms of their present mode of procedure?—Yes.

4758. I have here one of these advertisements in which these are the terms used. A man, speaking of course of himself, says: "His extensive experience both on home and foreign stations, dealing with seamen, military, naval, artisans and private individuals for 45 years has enabled him to utilise the most up-to-date, modern, rapid, painless curative treatment (where the general practitioner fails) and that without mercury or such questionable drugs." There can be no question of the class of disease that is intended to cater for?—No. Then there are people who write books. I had a patient some time ago who had gone to a quack on the strength of a book he had written, and he had distributed it. He was a naval patient, as a matter of fact.

4759. Will you tell me one more thing. Is there any popular horror of mercury as a remedial agent, which accounts for the man putting in that he does not use mercury?—I cannot say about amongst the general public. But soldiers do not seem to have any fear of it. Of course there is the old idea which was well-known, that mercury, if it is used unskilfully, salivates the patient; that is to say, it causes the mouth to become sore, and if it is pushed too much eventually the teeth would drop out.

4760. You think it is traceable to that old tradition of the abuse of mercury?—Yes, it was the abuse of mercury.

4761. (*Mr. Lane.*) At the commencement of your evidence you said the term "soft chancre" was applied to all sores, other than those that were syphilitic?—Yes.

4762. Does that include balanitis?—No, I put balanitis here as separate. I say balanitis and sores, the sores being divided into syphilitic and non-syphilitic.

4763. You would agree that a certain proportion of cases of balanitis are not in any sense of the word venereal?—Yes.

4764. That balanitis may occur among people of a gouty diathesis?—Yes.

4765. Would you include cases of that sort as venereal?—I suppose one would have to separate balanitis into venereal and non-venereal. Undoubtedly a certain proportion of cases of balanitis are venereal in origin.

4766. You speak of a definite system having been laid down by the authorities of the R.A.M.C.?—Yes.

4767. Is this carried out universally at all stations abroad, for instance?—As far as I know the system of regular treatment is carried out; that is to say, it is the duty of the medical officer in charge of these cases to enter on an official case sheet the kind of treatment he is giving and to observe his patients according to the instructions which are laid down in the Army Medical Regulations.

4768. May we gather from this that on foreign stations the soldier is treated in the most modern way, with salvarsan, for instance?—Of course I did not refer especially to any one particular treatment, but as a matter of fact in India now I believe the treatment with salvarsan is becoming more common, but it is not absolutely regular.

4769. May we know how many beds there are at the disposal of the military authorities in the Rochester Row Hospital, approximately?—Of course

we have all the beds; there are about 84, as far as I remember.

4770. Alluding again to the question of the police, you say there are more applicants from the police than there are beds; that a certain number of the men have to be denied admission and that their treatment is in consequence delayed?—Not delayed. It is left in the hands of the district surgeon.

4771. You say the penalty in the police force for contracting venereal disease is greater than in the Army. Can you tell us what the penalty is?—I cannot say what the penalty is definitely; but a policeman pays 2s. a day hospital stoppages; and then, rightly or wrongly, he thinks it affects his chances of promotion. Whether it does or not I cannot say.

4772. I am told by the Chief Surgeon of Police that every facility is now given for hospital treatment?—Yes; but it is quite possible the policeman thinks it affects his promotion when he is wrong in thinking so.

4773. In your clinique at Rochester Row how are the examinations for spirochaetes carried out? By the Indian ink method?—No, by the dark ground; the special condenser.

4774. By Levaditi's method?—No; the routine is to examine the specimen by dark ground illumination. We do not use Indian ink or other methods as routine; we only use Indian ink for demonstration purposes and teaching.

4775. Then you do this Wassermann test in the quite early stages of the disease systematically?—We test everybody by the Wassermann test in the hospital. Of course, if the diagnosis has been made by dark ground illumination, it may be merely a matter of academic interest but we always do it as routine.

4776. But you do not place much value on it at that stage?—No, not a great deal. We think it will be valuable years hence when we come to look up our statistics to see how patients got on whose treatment commenced when the Wassermann was already positive, as compared with those in whom it was not yet positive; but that will take some years.

4777. Is it your opinion that all the modifications of the Wassermann test are unreliable?—I should never rely on a modification for a diagnosis. I think, however, that when one has made the diagnosis, it is useful to use a modification in regulating the treatment. Actually, in addition to the original test, I use one which I think is the best modification; that is to say, Stern's. It is rather more delicate than the original at present, and it is useful to test a patient's serum by both methods; because if you get a positive reaction with the Stern test, it puts you on the *qui vive*, and you would be more likely to test the patient's serum again sooner than if you had only applied the original test and got a negative. I think also that it is justifiable to prolong the treatment of a patient already diagnosed, on the strength of a positive to the Stern test.

4778. Then you do not believe in Fleming's modification?—No.

4779. With regard to the treatment of gonorrhoea, you say the soldiers very often delay applying for treatment owing to ignorance?—Yes.

4780. But in the case of sores they apply very early indeed—at the first appearance of an abrasion?—Yes, generally.

4781. But they do not do the same in regard to gonorrhoea?—No, not the same; they say they did not notice it, or they give some other excuse. They do not come when the discharge is only serous. They come when it is purulent.

4782. But they are instructed in the gravity of the disease, I suppose?—Yes, they are.

4783. Then you really have very few chances of carrying out the abortive treatment?—Very few.

4784. You said that instruction to students could not be given with the material in general hospitals. Of course there is a considerable amount of venereal disease treated in hospitals?—In the early stages?

4785. In every stage I should say in my own experience?—I can only say they do not seem to get it.

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4786. You are speaking of the results of the education there?—Yes.

4787. Would you advocate a special department of venereology, as they have in America and in many towns on the Continent?—I think it would be useful, if it was only for instructional purposes.

4788. And would you also have examinations on this subject made a little more searching?—Yes.

4789. With reference to any imputed neglect on the part of examining bodies, the recent publicity given to this subject must acquit them of neglect?—Yes.

4790. Most of the advances in the treatment of syphilis have taken place since the year 1905?—Yes.

4791. 1905, I think, was the year that the spirochæte was discovered; 1906 the Wassermann, and 1909 the salvarsan treatment?—Yes and, of course, it was not published until March 1910, which was the first paper on salvarsan; so it is all within the last few years.

4792. Those are three immense advances?—Yes.

4793. Then you are in favour of notification, and you would suggest that the medical officer must notify all cases of venereal disease to the medical officer of health?—Yes.

4794. That would include cases of gonorrhœa?—Yes; that is, where it could be worked; it is purely a local option scheme.

4795. Is not this rather a breach of professional secrecy?—It is not a breach of professional secrecy, for instance, if one doctor consults with another.

4796. That would be with the consent of the patient?—This would be. I think it would be quite reasonable to tell the patient that his name would be given confidentially to the medical officer of health.

4797. You do not seem to think that the fact of notification would prevent the patient applying to a doctor who, he knows, would notify?—Provided, in the one case, you have the driving force that he cannot go to a chemist for treatment and, in the other case, you have his confidence that his name will not be divulged to anybody of lower rank than the practitioner.

4798. Do not you think a number of doctors would decline to work this method of notification?—Of course, I cannot say what a number of doctors' opinions would be; but I think that locally, in smaller places at any rate, it would be worked all right.

4799. Do you think in a first-class practice it would work? If a patient in a very prominent position came to you and you said you had to notify the case, do not you think that would act as a deterrent to him and that he would go to somebody who would decline to carry out the recommendation?—It is possible, of course; but I think so long as he knew that his name was not going to go further than the local medical officer of health, then there would not be very much trouble from that source.

4800. You would agree that notification itself is of no advantage at all to anyone, except for the purpose of statistics?—I think in smaller places you could get to the source of infection. I think it would be the means by which the medical officer of health could get into communication with the woman, whoever she was. In a small town I know, for instance, there was recently only one woman who infected a number of cases; there is only one woman of that sort there.

4801. You allude to the woman, but you do not allude to the man who is infected. The woman must have caught the disease from a man at some time or other?—But you cannot go too far back.

4802. Why go to the woman alone?—You could instruct her and tell her the danger she was.

4803. You say of this scheme here, that you would confidentially inform practitioners of removals into districts of patients under treatment for venereal diseases. There is a still further disclosure then to someone else of the fact?—I might say that these two schemes rather overlaps this and the scheme of national laboratories. I think if this came into force local notification would be unnecessary.

4804. But you would agree that according to this scheme, if the patient is moving about much from

district to district there would be half-a-dozen men or more who would know of his condition and it might be very detrimental to him?—That depends on the honour of the doctor concerned.

4805. But a patient with this disease is unduly sensitive, you will agree?—Yes, I quite agree.

(Mr. Lane.) And he would not like the idea of a number of people knowing the fact that he has venereal disease.

4806. (Sir David Brynmor Jones.) But as I read the scheme, the patient would go; as he changed his district he would change his doctor?—Yes.

4807. (Mrs. Creighton.) What would you do with a commercial traveller under those circumstances?—I suppose a commercial traveller has one permanent place.

4808. Not one permanent place where he might spread infection?—No.

4809. (Sir Almeric FitzRoy.) He has a domicile?—Probably he goes to some definite doctor and, presumably, that doctor, having diagnosed that he is suffering from one of these diseases, instructs him to do all in his power to prevent his spreading infection.

(Mr. Lane.) I have no further questions.

4810. (Mrs. Creighton.) When you treat a patient for syphilis in an early stage, do you warn him of the severe consequences of the disease always?—Yes; he is instructed as a routine in the necessity for continuing treatment as long as the medical officer considers it is necessary; and especially he is instructed if at any future date he wishes to marry he should previously consult a medical officer as to the desirability of it.

4811. And you tell him what the consequences may be if he neglects these things?—Yes, exactly.

4812. You allude in your paper to the methods employed in the American Navy; what are those?—I am relying here on a report of, I think it is, the medical officer of the American ship "Rainbow." They had a system by which any sailor who had exposed himself to infection was to report to the medical officer the following day, and, of course, the necessary means were applied to kill any infection.

4813. Then with regard to gonorrhœa; what is the result of neglected gonorrhœa?—One result is stricture of the urethra, or the patient may become crippled with rheumatism, or he may have epididymitis, and, of course, the worst result of all is the transmission to others.

4814. It is not a disease that might die out if it was not treated?—No.

4815. Then I should like to refer for one moment to the point the last questioner has already raised about the suggested notification, in order that the woman from whom the infection came might be sought out and treatment recommended to her?—Yes.

4816. Of course, if a woman goes to a doctor, and is found to have this disease, would you wish the same procedure to be followed?—Exactly.

4817. And that if she could point out the man who had infected her, it would be followed out?—Distinctly.

4818. (Canon Horsley.) Is that done in India; is the woman asked to point out the soldier?—In India these women are professional women, and it is impossible.

4819. (Mrs. Creighton.) Even supposing she were a professional woman, if she was not diseased when she was infected by a soldier, equally she would suffer from it; why should not she, then, point out the soldier?—I used to go on the principle in India that all these women in the bazaar were already suffering from intractable gonorrhœa, which was more infectious at one time than another. As regards syphilis, the period which elapses between the exposure to infection and the onset of the disease is so long that it would be impossible in the case of a woman of that kind to fix the blame on this, that, or the other person.

4820. But when you found a woman in India was thus incurably diseased, what did you do with her?—She was instructed in personal hygiene. We did not exclude her; she was not in any way oppressed. She was just instructed in the best method of preventing the transmission of her disease to other people.

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4821. Did you find she was inclined to follow the instruction at all?—Yes; so long as you show them you are not going to allow the police to oppress them.

4822. Keeping away the police from them was the vital thing?—That was the thing. I made a special point of that. I would not allow any of the police to interfere in any shape or form. In fact, I have never consulted the police in these matters.

4823. And in that way you won the confidence of the women?—That was so.

4824. And they were willing to be treated and follow your advice?—Yes, they were willing to carry out any measure I recommended.

4825. (Dr. Mott.) You say that almost all cases of late syphilis of the nervous system give a history of irregular treatment. I suppose you were referring to tabes and general paralysis?—Yes, that is my general experience.

4826. Can you explain, then, why it is in countries where syphilis is very rife, and where treatment is not known, cases of tabes and general paralysis should be so very rarely met with?—I suppose you are referring to Uganda and those countries?

4827. Yes?—I agree with your idea on it, that it is probable (at least I think it is your idea) it is a case of the place of least resistance. There is a greater strain on the nervous system in more civilised countries, and there is a greater prevalence of diseases of the nervous system.

4828. I suppose you find, the same as I have, that it is the very mild cases of primary infection and secondary lesions that afterwards develop these cases?—Yes, it seems to be so.

4829. And, in consequence of those diseases not being diagnosed in the first place, treatment was not carried out until too late and the nervous system was infected?—Yes, that is the usual history.

4830. Now we know that general paralysis, and also tabes, generally means infection of the nervous system by the spirochete; it is possible that the infection takes place when the roseolar rash occurs?—Yes.

4831. Only it remains latent?—Yes.

4832. And remaining latent for a great number of years, it may not injure the man at all provided some other contributory factor does not come in which lowers the resistance so that the organism develops?—Yes.

4833. Is that your view?—Yes.

4834. From that you would deduce this very practical and important fact, that if we could treat all these cases when the primary sore occurred, the chances of the generalisation of the organism and the secondary infection of the nervous system, the same as the roseolar rash and the secondary rashes, would not occur to anything like the extent they have done in the past?—Yes, exactly; that is so.

4835. Have you any idea of what proportion of cases of syphilis subsequently develop tabes and general paralysis?—No, I cannot say.

4836. There is an interesting paper published by Mattauschek and Pilez of Vienna in the "Wiener Medizinische Klinik," and they refer to 4,134 officers who suffered from syphilis between 1880 and 1900; of those 198 suffered with general paralysis, 113 with tabes, and 132 with cerebro-spinal syphilis. So that practically 10 per cent. of those officers subsequently developed these late nervous diseases. Would you think that a rather high figure?—Yes, it does seem rather high to me.

4837. Still, probably they have very good evidence there for that?—Yes, no doubt.

4838. Then, with regard to the Wassermann reaction, do you still use the extract of syphilitic liver?—No. I use now an extract made very like that recommended by McKintosh and Fildes. It is rather a modification of Sarchs; it is extract of human heart.

4839. And cholesterol?—Yes.

4840. That is what we use; it answers quite as well. I think it is more certain than the syphilitic liver?—Yes.

4841. Then with regard to the value of the Wassermann reaction, Colonel Gibbard in his evidence stated that some cases, in spite of treatment, continued to give a Wassermann reaction?—Yes.

4842. We know in general paralysis the Wassermann reaction is most pronounced and continuous in spite of treatment?—Yes.

4843. And I suppose you are really keeping records of those cases with the view to seeing what they develop later?—Yes, I have a number of cases, I know, of inveterate positives.

4844. Then I suppose in doing the Wassermann reaction you always do four dilutions, unless you get a negative right off with the highest?—Do you mean of the fluid?

4845. No, I mean of the blood?—I always test on the principle that the stronger the reaction the greater the amount of complement deviated, not the other way, the stronger the reaction, the less the amount of serum required.

4846. So long as you have some constant method it does not very much matter, does it?—No.

4847. I asked a question of Col. Gibbard, which seemed to me of very great importance, with regard to the Wassermann reaction. He said if a patient after treatment gave a positive reaction, it would rather prohibit permission to marry. Would you agree with that?—I always take this view; it depends on the age of the infection. I think that in the later stages it becomes localised and then a positive Wassermann does not indicate so much; the risk is purely personal instead of general.

4848. I suppose the Wassermann reaction is more or less an indication of an active state of the organism, or of the tissues reacting to the organism?—A little while ago I gave out the theory (which was pure theory) that it was possible, in these cases of inveterate Wassermann reaction, the tissues had developed a habit of giving off this substance called the Wassermann substance in response to the long continued stimulus of the spirochete, and it was possible after the stimulus was removed, the tissues continued to give off this Wassermann substance. That is pure theory, of course.

4849. Still, it is a valuable hypothesis. It is a fact that in the cerebro-spinal fluid in general paralysis you invariably get a positive Wassermann reaction?—Yes.

4850. It is possible that the spirochete is always in the brain?—Yes.

4851. So that it would rather indicate some connection between the spirochete and the reaction?—Yes, exactly.

4852. There is one point I think we should like to know about. It has not been touched upon; that is, you do not believe in taking the blood in a small quantity by pricking the ear, do you?—It is purely a matter of convenience. I think one ought to get a good quantity of serum. It gives a better test, and it is much easier to take it out of a vein.

4853. And it does not hurt the patient half so much?—No, it does not hurt them half so much. And except in the beginning when I had to take it out from my own just for example I have never had any difficulty in getting a patient to have a vein punctured.

4854. I have often been told they have been hurt far less by pricking a vein than having it taken from the ear?—Yes.

4855. Then with regard to the examination of the cerebro-spinal fluid; in that case you have referred to there was a marked lympho-cytosis as well as there not?—Yes.

4856. Under treatment both disappeared, I suppose?—We have not examined the cerebro-spinal fluid, but the improvement is enormous.

4857. Have you had sufficient experience of lumbar puncture to say what proportion of cases of syphilitic disease of the nervous system, as distinct from the late so-called parasyphilitic affections, give a positive reaction. I mean, there is a good deal of dispute about that, is there not?—Yes, of course; but I think it is largely a matter of how much fluid is used in the test. In these cases now we are using larger quantities of

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fluid in the tests than we used to do. For instance I use for the reaction of the fluid 100 per cent., 50 per cent., and so on down to the smaller quantities. I find in a very high proportion of those cases that have symptoms owing to early syphilis of the central nervous system, it requires a larger quantity of fluid to obtain a positive Wassermann reaction.

4858. It is a question of the quantity of fluid?—It is only in the larger quantities that early cases give a positive reaction. If one were to use the quantity originally recommended, then one would find a high proportion of negatives in such cases.

4859. There is no correlation between the lymphocytosis and the degree of Wasserman reaction?—No, there seems to be none.

4860. And in all cases where you are in doubt about the syphilitic infection of the nervous system, you would recommend lumbar puncture to be done?—Yes, because I think the treatment should be more prolonged in those cases.

4861. You remarked that the hospitals had not sufficient material or opportunities for teaching students?—That is what I thought was possible.

4862. I think there is sufficient material; but the point is, if students are not examined in it, they will not learn it?—That is so, if they are not examined on it.

4863. That is quite true. With regard to these laboratories, I suppose you know that in large cities where there are universities, the municipalities generally are in touch with the universities; for example, in Manchester, Liverpool, Sheffield and Birmingham the pathological laboratories of the university practically do all the bacteriological work?—Yes, but I have been to smaller towns, and it seems to me that, in regard to practitioners generally, the facilities are not yet near enough to their hands; they want something more.

4864. It is the smaller places you are referring to?—Yes.

4865. (*Canon Horsley.*) You said, I think, that you thought very few men were found to be infected before they enlisted? The infection came afterwards?—Yes.

4866. Of the recruits as a whole?—I cannot tell you the proportion of recruits who are rejected for venereal disease; probably some other witness will give you better evidence on that than I can.

4867. But, on the whole, I was glad to hear you say that young men when they first join the army were not very largely infected?—No.

4868. That would point to the desirability of giving instruction at the very earliest opportunity to recruits?—Yes.

4869. Do you know how often those lectures are given in the Army?—I think there is no regulation, as far as I know. They are largely left to the discretion of the medical officer.

4870. Things which are left to the discretion of people are not always so regularly done as things are under rule, are they?—As a matter of fact, I happen to know the scheme which is carried out by Major Galley at the Caterham Recruit Depot. His scheme is this, roughly. He takes young recruits just after joining, and gives them a general talk in a homely kind of way on personal hygiene, and touches on these things. Then he takes a later opportunity, just before they are going to join their regiments, of giving them two more definite lectures on the importance of keeping fit physically. He shows them how good it is for them to keep their general health up, and so on, and, of course, touches on things which are detrimental to that. He gives them lectures on that, and generally impresses on them that they should avoid drinking, and looses women, when they go to London.

4871. Colonel Gibbard did not seem to know whether it was done or not. I want to press the point of the importance of getting at the recruits. I have had to address recruits myself at Caterham, and also at Maidstone, and I would impress the importance of getting advice to them as quickly as you can?—Of course he could not say definitely, because it is left a good deal to the discretion of the medical officer, who realises the importance of this thing of course. The

main thing is to preach continence, and healthy recreation.

4872. In that hospital where you have the police, do you give them cards the same as you give the soldiers?—Yes, they all have cards.

4873. And those cards we learn are going to be revised?—Yes.

4874. Have you anything to do with that revision?—Yes.

4875. In making that revision, do not you think it would be well to add definite advice to the men to avoid fornication and not merely to get cured of the disease. There is no such advice on the card at present?—No, I cannot say I have considered it from that point of view. I do not think there would be any advantage in it.

4876. You do not think prevention is better than cure?—You mean exposure to infection later on after they are cured?

4877. Yes?—We assume they have had a sufficient lesson already.

4878. I have known a man who had 18 attacks of delirium tremens. One would have thought the first attack would have cured him?—Yes.

4879. You spoke about a pinhead sore—sometimes the outward indication is very tiny?—Yes.

4880. Does that remain small for a long time?—No. If it were not treated it would grow larger and larger, until it is a typical sore.

4881. If I had a pinhead pimple coming out on me, I should not take any notice of it probably for some time; but it grows very rapidly?—Of course the situation ought to arouse suspicion.

4882. I was only looking at it from the point of view of early diagnosis and treatment. You say gonorrhoea ought to be attacked within 48 hours?—Yes.

4883. Does the man always know within 48 hours that he has got it?—No; but my idea is, if he has exposed himself to infection, he ought to take steps to mitigate the effects of a possible infection.

4884. But it does not necessarily show itself in 48 hours?—No.

4885. In what time do you say, 48 days?—No, three days.

4886. You pretty soon know?—Yes.

4887. With regard to these laboratories, which, of course, would be a most desirable thing, but a tremendous expense, I understand you would like one for every 50,000 people. That is the proportion you suggested?—The distribution, of course, must be determined by local conditions. In a congested area I suggest one laboratory would serve for more than 50,000 people.

4888. At the rate of one for every 50,000, that means 700 at once for England and Wales?—Yes, but of course they would be bigger and proportionably less numerous in congested areas.

4889. You suggest that borough councils, and so on, municipal bodies, might do it?—The whole scheme of laboratories throughout the country might be merged under one central authority.

4890. But do you know, in London, my late borough, the borough of Southwark, is the only one which had an analyst and a laboratory of its own. I do not know the state of affairs now; but two years ago we were unique in London in having a laboratory of our own where we did bacteriological work?—Yes, I know.

4891. That was the only borough in London doing it?—Yes, I should like to bring them all up to the same standard.

4892. Then with regard to notification at the option of local councils, does that mean that it might be adopted, for example, in garrison towns—as I suggested at our last sitting, and not adopted in others—a sort of permissive compulsory notification?—Quite so. You could not carry it to extremes. It would have to be tried in a very careful way at first, I think. But there are certain towns and districts in the country where I think it could very easily be carried out.

4893. Garrison and seaport towns, for instance?—Possibly.

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4894. If you eliminated garrison and seaport towns you could not find syphilis very prevalent elsewhere?—No, I think not.

4895. Then, without having a national system of compulsion, you think it might be tried in such definite places as that?—Quite so.

4896. (*Sir John Collie.*) You spoke of three classes of people who might pay for pathological examinations, and so forth?—Yes.

4897. Would you mind repeating them?—The insured class through the Insurance Commissioners and the Public Health Authorities in return for such things as diphtheria examinations, and so on; and a certain number of people who are drawing a greater income than the insured class might pay some sum.

4898. You are aware that the insured classes have already paid for what is considered adequate treatment?—Yes.

4899. Do you not think that they should be entitled to efficient treatment without any increased payment?—I do not propose to increase their contributions. I propose the Insurance Commissioners should find the money out of their existing funds, or Parliament should find somehow the means to give the insured class these benefits.

4900. Do you think the treatment, of these venereal diseases in poor class practice is adequate?—How do you mean?

4901. I refer to medical men who keep open shops and dispensaries?—You do not mean the Insurance panels?

4902. Do you think adequate treatment is likely to be applied in the class of practice where doctors are charging such small sums of 6d. or 1s.?—No, not if they are treated as private patients at those fees.

4903. That is what I mean. I am not now referring to insured people alone?—No; I do not see how the doctor could do it.

4904. I think you stated somewhere, and we all know it, that there is a very vigorous campaign being carried on against the infection of tuberculosis?—Yes.

4905. Do you agree it is as necessary to have as vigorous a campaign against the infectivity of venereal disease?—I think you ought to have the most vigorous campaign you possibly could have against it.

4906. I wanted to ask you one or two questions about innocent contagion. I do not know if you have any experience of it, of non-venereal infection of these diseases, because I think it is very important?—You mean accidental infection?

4907. Yes?—Yes, a little.

4908. You do see some cases?—Yes.

4909. I suppose as a pathologist, you will agree that these diseases may be transmitted even from a public lavatory, and so forth?—I have not any experience of those cases.

4910. From your knowledge of the disease, is the thing possible?—Do you mean gonorrhœa?

4911. Yes, at the early stages when there is a free discharge?—Not gonorrhœa. I doubt if gonorrhœa would be transmitted.

4912. Syphilis?—I think the infection must have been implanted very recently, and the chances are very little.

4913. Or soft chancre?—The same thing applies to soft chancre.

4914. You agree that much valuable time is always lost when a man gets imperfectly treated in the way you have spoken of, or where he goes to a quack or to a chemist?—Yes.

4915. There is one point more. How much blood do you like to be supplied with; two, three, or five c.c.?—I like to have a c.c. of blood serum.

4916. One c.c.?—I can do with less than that. As a matter of practice I take 10 c.c.'s, but I do not mind taking less.

4917. And you do not mind more?—And I do not mind more.

4918. (*Mrs. Burgwin.*) When you said you would give instruction to young boys, do you mean you would actually give this instruction on syphilis to girls and boys—school children?—Yes. I should point out the dangers which arise from these diseases.

4919. You would not be content with merely pointing the moral standard. I suppose we were all brought up under the moral standard?—No, I do not think it is sufficient in the case of boys. I have had patients who have come to me and said, "If only 'somebody had told me what the consequences of all 'this would be, I know I should not have had it.'" They were never instructed.

4920. When you spoke about those women in the cantonments in India, were they women getting their living by prostitution?—Yes.

4921. When you put them under treatment, they were not getting their living. How did they live?—They were given an allowance. They had a food allowance; I think it was two annas a day—whatever it costs a native of India to live.

(*Chairman.*) These are all native women who live on very little.

(*Mrs. Burgwin.*) Yes, I understand that.

4922. (*Chairman.*) It would be two or three annas a day?—Yes; I think they were given two annas out of the hospital fund.

4923. (*Mrs. Burgwin.*) Then I could understand, if you gave them the means by which they can live, that they would suffer treatment, would they not?—Yes; of course it was recognised that they must be maintained while they were in hospital, by the medical authorities.

4924. Then with regard to the number of men in the Army suffering from syphilis, in your opinion, would you not decrease the number of these men suffering from this special disease if you had much greater facilities for married men in the Army; on the strength of the regiment I mean?—That I cannot say. Of course it would have to be tried. But I do not think it would be practicable to increase the married strength sufficiently to make a marked impression on the amount of venereal disease.

4925. Do you think there is a higher moral tone amongst the men? We are told that this disease has decreased considerably during the last few years. Is that due to a higher moral standard, or is it that men know how to take care of themselves better? Is that a fair question to ask you?—I think they have more distractions. Under the old conditions of service they had nothing to do but to go to the canteen and drink beer. Now they have a good many other distractions, and, of course, their minds are better occupied.

4926. It all tends to make them better soldiers and to live better lives?—It tends to make them better soldiers. We lay great stress on games and sports generally, and encourage them. Of course we lay great stress on healthy recreation, much more stress than used to be laid before, and that I think has tended to cause a decrease in these diseases.

4927. You said that in talking to the men in your lectures you impress upon them the necessity of keeping physically fit?—I do not do that; that is Major Galley who has charge of the recruits at Caterham. I happen to know that he carries out this.

4928. I would emphasise also that they should be taught to be morally fit. Would you not believe in that as well?—Quite so; but it is very difficult to teach a young soldier.

(*Mrs. Burgwin.*) I do not think it ought to be.

(*Mr. Arthur Newsholme.*) I have no questions to ask the witness.

(*Chairman.*) We are very much obliged to you.

The witness withdrew.

FOURTEENTH DAY.

Friday, 30th January 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Sir ARTHUR H. DOWNES, M.D., called and examined.

4929. (Chairman.) You are medical inspector for Poor Law purposes of the Local Government Board?—I am.

4930. How long have you held that office?—Since 1889; but may I say that I am actually medical inspector of the Poor Law in the metropolis and my immediate duties are concerned with the metropolis.

4931. Could you say, in very general terms, what your responsibilities are?—I am medical inspector in the metropolitan area with the usual duties of a medical inspector. I advise the Board on any matters arising out of my reports or those of the assistant inspectors in the metropolis; but I only advise the Board on such other matters as they may refer to me.

4932. Do you feel yourself at liberty at any time to initiate any recommendations to the Board on information which comes to you in the course of your duties?—I have done so. It is not strictly part of my duties, but the Board has always given me a very free hand, and I may say I have taken a certain latitude in that way.

4933. You do not inspect Poor Law institutions outside London?—Not unless I am specially asked to do so.

4934. Could you tell us what the functions of the Poor Law are with regard to venereal disease?—They have no special function apart from that of any other disease.

4935. In regard to these diseases, the Poor Law puts them on exactly the same plane as all other diseases?—Precisely so.

4936. Then what is the Poor Law bound to do in the way of relieving those suffering from venereal diseases?—First of all, may I say that apart from the Guardians general powers of relief the question of Poor Law medical relief, curiously enough, does not appear to rest on any statute except in London. The statute of 43 Elizabeth makes no allusion whatever to medical relief, and the Act of 1834, upon which the modern Poor Law is based, makes only a passing and indirect allusion to it. As a matter of fact, the only legislation which one can really regard as specifically dealing with the matter of Poor Law medical relief is the metropolitan legislation that was initiated in 1867, the Metropolitan Poor Act. London has medical legislation, but the rest of the country has practically none.

4937. Then there is no statutory obligation in the case of medical relief outside London; but I suppose the moral law comes in and you recognise the obligation to relieve all paupers medically?—Yes; it has grown up by custom and practice and it has come to form a very large, almost predominant, part of the relief of necessity. And the view just now taken of necessity is that a man must be relieved not only because he is in need of the absolute bare necessities of life, but because he is in urgent need of some important assistance, such as medical, which he cannot, of his own means or from charitable resources, find for himself.

4938. Then the definition of "destitution" turns entirely on the means of the individual?—And the importance of the necessity.

4939. And the importance of the necessity?—Yes.

4940. So that a poor man who could afford a minor fee but could not afford the fee required for a big operation might claim to be destitute in that sense?—Yes, under the definition which is now placed upon it. I may say that a fuller and more valuable definition than I could give you would be found in Mr. Adrian's evidence before the Poor Law Commission and also in the circular on out relief of the Local Government Board which was issued about four years ago. They give it in terms which are more official than mine.

4941. How far does the Insurance Act supplement or duplicate or relieve your functions in the way of medical relief?—Comparatively little. In the first place, apart from sanatorium benefit, it does not as yet provide for dependents who are, perhaps, the more important from the point of view of out-door medical relief; and, secondly, it does not provide for institutional relief.

4942. It is intended to do so ultimately, is it not?—At present there is no relief in that way.

4943. Because there are no institutions?—Because there are no institutions.

4944. But in the future institutional treatment is to be provided under the Act, is it not?—If that were so it would relieve the Poor Law to a considerable extent if such institutions were provided.

4945. But would it be a fact that any of the people who, previous to the passing of the Act came under your administration, would now go to panel doctors instead?—I do not think to any noticeable extent. The class of people who go to the panel doctors are not the class who came to the out-door medical officer very largely. And, as I have said, the panel doctor has no institution, and those who require institutional treatment still come to the infirmaries.

4946. So far, you have noticed no overlapping on the one hand and do not experience any relief on the other?—No, I think that is so.

4947. Would you state the way in which the Poor Law operates in the way of relieving people who want medical treatment?—The person who needs medical treatment would go to the relieving officer for an order for the attendance of a doctor, and the relieving officer would give him an order, either to attend at the doctor's dispensary or residence or, if it is a case which the doctor should visit, an order for the doctor to pay that visit, and, if need be, the order would be marked "urgent." Having been seen by the doctor, the doctor would continue the treatment either at the dispensary or his own surgery or the patient's own home; or he would, if he thought fit, give an order for the case to be removed to an infirmary or sick ward.

4948. The relieving officer, I suppose, is not a doctor?—No; I do not know of any case.

4949. He merely decides that the person who applies to him has the necessary degree of destitution to justify him?—That is so. As a matter of fact, I take it that he very rarely stands between the applicant and the doctor unless it is a case of very great abuse; although I believe the district medical officers value

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the protection which is afforded to them by the existence of the relieving officer, who stands in the position of an almoner.

4950. Then in some cases the doctor would order the applicant to go to an infirmary?—Yes.

4951. In other cases he would be ordered to attend at the out-patients' department for intermittent treatment and observation?—Yes.

4952. And in still other cases, I suppose, the doctor would give him medicine and leave it at that?—Yes. What you have called the out-patients' department in London is usually an organised dispensary where several medical men attend and where there is a dispenser. In most of the large provincial towns they now have dispensaries, or will have. You were speaking of the mode of admission. I may say that in addition to that, cases of an urgent character can be admitted direct into an infirmary or a sick ward. The chief officer of the institution has power to admit such a case without order, and he reports it to the guardians at their next meeting. The guardians have also powers, of course, to direct the admission of that case, and there are certain old powers of justices of the peace and overseers in cases of urgent sickness.

4953. Taking the case of persons who come with venereal diseases, do the Poor Law authorities, as a rule, insist on their going into an institution?—Not necessarily; but I believe a considerable proportion of them object to giving out relief to persons with venereal disease.

4954. Do you think it has the effect of deterring these people because they believe they would be ordered to go into an institution?—I should think it would.

4955. And yet, I suppose, in many cases institutional treatment is the only treatment which is of any value?—Precisely, and the guardians would naturally feel hesitation in assisting a man, or a woman either, to live a life outside which was one of public danger.

4956. I suppose you have formed a very clear opinion as to the state and nature of the accommodation which is provided under the Poor Law for dealing with venereal disease. We have had some evidence commenting rather unfavourably on the accommodation which is provided in some cases. What is your general impression?—I can only speak for my own knowledge of London. It is a good many years since I used to go round the country workhouses. As far as London is concerned, London is provided with a very fine system of infirmaries, almost all of which are equal in their administration to a general hospital. They are well staffed and they have experienced medical men at the head of them, excellent nurses, and good buildings as a rule. Most of them are able to set aside special wards for these cases, but they are not always able to reserve those wards entirely; the number of cases is not sufficient to justify their setting aside always beds which are very valuable. They have also to isolate other cases, and they use the same wards from time to time for those cases. Other men frankly treat their cases during the isolation stages in the general wards; and one medical superintendent has submitted to me that it is undesirable to make a special class of these patients in separate wards. He also says—and without exception all the medical superintendents have given me the same reply—they have none of them known of any ill effects from the treatment of these cases in wards with others.

4957. Is there any objection on the part of the other patients?—Comparatively little; yet I recognise that there must be a sentimental objection, and from time to time we have had at the Local Government Board letters from patients stating objections. But, in practice, no ill result that I can ascertain has happened to any patient. The only cases of ill result of infection of others of which I am aware have been several cases of officers; one, a medical man, inoculated himself in the course of operation and two medical men just before my time who were similarly infected. Another was the case of an officer who was giving an injection in a case of gonorrhœa and it infected his eye; and the other was a nurse who contracted

syphilis, I am sorry to say, from a congenital case of an infant. In one case of which I am aware a child was apparently affected by its mother, but whether in the workhouse or not I do not know. Those are all the cross infections of which I have any knowledge.

4958. In theory then all of your infirmaries take venereal patients; but in practice sometimes they have not the accommodation available at the time?—The Poor Law takes everything; it has to. The difficulty in some of these cases is that some of these men are of a very objectionable character, and in some few instances they deliberately set themselves to insult the nurses, and they are almost impossible for female nurses to deal with. One case of that kind was so bad that I believe the guardians passed a resolution—which may have been *ultra vires* or not—that the man should have no relief whatever except in the workhouse in future. I do not know what became of him, but I think they would have been held to be justified if the facts had been made public.

4959. We may take it that the Poor Law institutions, in London at all events, have a more advanced view of the treatment of these diseases than the general hospitals?—The Poor Law compels them to do so. It is the last resort of the man who is destitute.

4960. But, as you know, some of the general hospitals, under their Statutes, can refuse to deal with these cases?—I believe that is so.

4961. Do you think that your institutions, if the wider and more general treatment of these diseases is taken up, would require much increase and development; are they quite adequate?—Several of the medical superintendents, I think, would rather like to see some specialisation of the treatment of venereal diseases. From an administrative point of view, of course, there is a good deal to be said for that; the only objection which occurs to me is that it may be undesirable to earmark patients, so to speak, by sending them to a hospital which is of a known character.

4962. You think, on the whole, the better course of development, if such a development becomes necessary, is a special ward rather than special hospitals?—Yes; the difficulty of a single union is that it may not have enough cases at one time to enable it to develop the special lines of treatment and special lines of diagnosis and for classification which are desirable. Guardians have a great deal of power of combination. I do not know whether the Commission would care to hear about them; but outside London any two or more boards of guardians can form a joint committee, with the consent of the Local Government Board, for any special purpose. In London, of course, we have the Metropolitan Asylums Board, which is a federation of all the guardians. Then, in addition to that, sometimes a board of guardians which has spare accommodation will specialise, and will take cases of a particular character from other unions. We have at the present time, for instance, two boards which take cases of epilepsy and make special accommodation of these cases. So any board of guardians that desired could provide special accommodation and take cases from other unions, just as at Birmingham the Birmingham Guardians take cases of mental deficiency for other unions.

4963. Apparently your large towns, inclusive of London, such as Liverpool and Birmingham, have made large provision for the treatment of venereal cases?—The towns with barracks and the seaport towns are, of course, those which have made the most provision and get the most demand.

4964. In those cases salvarsan treatment can be given?—Much more readily where you can have an organised system.

4965. And in some of these institutions the Wassermann test can be applied?—It is applied in a large number.

4966. As I see from your table?—Yes. In London, with very few exceptions, the Wassermann test can be applied.

4967. Where the Wassermann test cannot be applied, would each of these unions be able to obtain material in the right way to send to the central institution for testing?—They all have power.

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4968. Have they the knowledge?—Are you speaking of the ordinary country unions?

4969. Yes, of the country unions?—The ordinary country union as a rule is served by the doctor of the neighbourhood; he is generally the chief practitioner of the town, and he has the same knowledge which he applies to his private patients.

4970. Would you think it is desirable that all doctors of unions should have enough knowledge to take material from patients and send it to some central institution to be tested?—I think it would be very desirable.

4971. That knowledge is not universal at present?—No; and I should add, from some of the replies I have been looking through, that the medical profession has not yet wholly accepted the completeness of the Wassermann test.

4972. That is so?—They are probably cautious. Some of them speak of the days when the Opsonic Index was thought to be absolutely essential, and others talk of the time of Koch's "tuberculin"; some say, "We are going on a little too fast, until we know a little more about it." I think it is a conservative caution which may have merit.

4973. I suppose we may take it that the small unions could never be expected to do much more than provide material for testing purposes?—No; they would have no facility for starting a laboratory of their own.

4974. But the guardians of these small unions have powers, have they not, in special cases, to send any patient to an institution for treatment?—The guardians have extraordinarily elastic powers in that way. They can send a patient anywhere within reason, subject, of course, to the auditor being satisfied, with the reasonableness of the cost, and of the legality of what they have done. They can send a patient on medical recommendation anywhere.

4975. In that case the guardians would have to pay for the Wassermann test of the patient, and for the salvarsan treatment if it were required?—Yes, they have full power.

4976. You think your London infirmaries are sufficiently equipped and efficient to deal with these diseases?—Most of them send their Wassermann tests either to the Wassermann Institute or the Clinical Research or to some pathological laboratory. But there is machinery in London, of course, for establishing a poor law laboratory; the Metropolitan Asylums Board have one already. Professor Sims Woodhead is the advising director and Dr. Cartwright Wood is the technical director. They do a large amount of work of this character already, and that could very readily be extended to the metropolis if the need arose.

4977. Is it your experience that the poor people in London have any reluctance to enter your Poor Law infirmaries?—No, quite the contrary; they do not regard them as Poor Law institutions in many instances. They are regarded more as hospitals, and I have actually known cases where persons have preferred to go to the infirmary, and justified it on the ground that they have been ratepayers, and therefore had a certain claim on the infirmary; whereas, if they went to the hospital they would be dependent on charity, and they desired not to be dependent on charity at all.

4978. A person who is relieved in one of these infirmaries, I understand, does not lose his franchise for that reason, as he does if he becomes a pauper. Is that so?—To my mind the law is clear, but the practice is a little difficult. The law is, and has been ever since 1885, I think, that no person shall be disqualified as a Parliamentary or municipal voter, or as a burgess, by reason of any medical or surgical assistance to himself or to any dependant of his. But when the patient has come into an institution the question has arisen: which predominates, his medical treatment or his maintenance. Most subtle questions have arisen out of that as to which predominates, maintenance or treatment, and revising barristers, I believe, have taken different lines of practice. I think there was some evidence before the Poor Law Commission on that point.

4979. The important thing is that you can tell us you recognise no reluctance on the part of the poor to enter these institutions?—That is so.

4980. (*Sir Almeric FitzRoy.*) Has not the point between rival decisions on the part of revising barristers been determined by a decision of the High Court on appeal?—I am afraid I cannot tell you. There is something in the Report of the Poor Law Commission about it, but I do not think that has been settled in the High Court. [*See Mr. Adrian's evidence to the Poor Law Commission, Q. 116-7.*]

4981. I should not think it was a matter which had been left to the conflicting decisions of revising barristers?—A similar question arises in the case of old age pensions, and quite recently I had to go down to a house in the country to see about 100 old age pensioners, as to whether their medical requirements predominated over their maintenance requirements. They were inmates of a workhouse, and it was a most difficult thing to do.

4982. (*Chairman.*) Reviewing such statistics as you have got, is it your opinion that there is no great prevalence of these diseases among the very poor?—In measuring the prevalence it depends on what scale of balances you use. If one were to take the Wassermann test it is possible one would be horrified at the results. But the ordinary clinical evidence is the only balance we can use generally, because we must take the mode of deciding which has been in practice amongst medical men, and we cannot expect every man to go on the Wassermann test. It is better, therefore, to use one balance (even if it is a bad one) all through to measure your results than to measure some on a highly scientific chemical balance and others on another. So, taking the ordinary clinical evidence, I attach considerable importance to the general opinions which I get, that venereal disease is less prevalent and milder amongst the poor than it was formerly. That is in London. In the returns from the country opinions rather vary, but, on the whole, they appear to be to the same effect. The exceptions are chiefly in the seaport towns, and in a considerable number of cases independent reporters make the statement that it is due to foreign sailors that the disease is prevalent and virulent in certain places.

4983. You have given us some figures which you say were obtained by the Poor Law inspectors returning a number of indoor cases of venereal diseases chargeable to boards of guardians in England and Wales on 1st July 1911. Those figures are that 187 out of 643 unions had indoor cases suffering from those diseases on that day; 186 unions, some of which had no cases chargeable on the day of the return, had special wards set apart for these diseases, and 51 unions had arrangements under which such cases were sent to special hospitals?—Yes.

4984. Then the number of cases chargeable is: men, 368; women, 377; children, 101; total, 846. Of this total it was stated that 99 had been soldiers or sailors, and the total number of indoor paupers of all classes on the date of the return was 235,863. That, of course, works out at a very small proportion of venereal disease?—Yes; but there are a good many deductions to be made from such value as a return of this kind may have. Personally, I do not attach much importance to these figures. The figures themselves were, first of all, obtained not so much from the point of view of ascertaining the prevalence of the disease as of ascertaining the number of cases that would want special accommodation; and, if I remember rightly, what was asked for there was, the earlier stages of syphilis, the congenital cases of syphilis in the first year, and cases of gonorrhoea. I do not think the tertiary cases were included, nor the parasyphilis, so that is a very large deduction. Then there is also this consideration, that the persons who suffer from these diseases in the earlier stages, for various reasons, do not come to the Poor Law. For the most part, I think, they are people who are able to continue about, either in their occupations or in the life which they prefer to live, and they do not want to become inmates of an institution. Therefore the tendency would be for them rather to go—a very large number of these

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people are not without means—either to a hospital out-door department, or a chemist, or to private medical men, whatever the case may be. I do not think they come much to the Poor Law.

4985. So we may take it that these figures reckoned from the 1st July 1911 only include cases arrived at by clinical observation, and do not include parasyphilitic diseases or other consequential diseases, or syphilis in the later stages at all?—That is so.

4986. Then the probability is, if the whole of your workhouse population could be tested at any time by the Wassermann test, that a very much larger proportion of that population would prove to be syphilised?—Yes, very much larger; I feel fully confident that would be so.

4987. Then I am afraid we cannot look upon this return as giving us any idea of the prevalence of venereal diseases among the poorer classes?—No, it merely shows you what number of cases of the earlier stages of the disease were actually under treatment on a particular date in Poor Law establishments. If the tertiary cases had been asked for, of course there would have been a very much larger number. The tendency is rather for the later stages of these diseases to come to the Poor Law, when the people can no longer work and are thrown out of employment.

4988. Now this other table of yours, "Proportion per 1,000 paupers at different age-groups suffering from venereal diseases." The net result of that is that in the 128 unions of England and Wales the total of paupers is only 2·4 per cent. and in London 2·6?—That I think is obtained by the Poor Law Commission.

4989. Yes; it is the Poor Law Commission Return, but that I think only deals with 128 unions. The proportion in most of these cases is very low, but it is very light and it is vitiated by the causes you have told us of?—Yes; in that case no definition of what kind of venereal disease was to be returned was given. The Commission simply asked for venereal disease. They took 128 unions, a selection of typical unions of the country, with a very large population; if I remember rightly, about 10 millions.

4990. The figures are not given on that table. I suppose the 128 unions would include something like 10 millions of people.

(*Dr. Arthur Newsholme.*) It is just over 10 millions, I think.

4991. (*Chairman.*) The total number of population in all unions, London and provincial, is 10,071,000; but we must take it that those figures are quite untrustworthy for our purposes?—I attach very little value to them.

4992. Now coming to your big table in which all sorts of information are tabulated, in the column headed "Approximate Total of Cases in the past 12 months," does that mean different cases?—I am in a little difficulty. This table was not obtained by myself; I am really putting it in on behalf of the Local Government Board. It was obtained by the Local Government Board through their general inspectors, I believe.

(*Sir Kenelm Digby.*) For this inquiry, or for what purpose?

(*Dr. Arthur Newsholme.*) I think for this inquiry.

(*Witness.*) I beg your pardon, this is another return.

4993. (*Chairman.*) What is the date of this return?—This was a return obtained through the offices of Dr. Fuller, the medical inspector for the provinces, for the information of the Commission; not by me, but by the Local Government Board.

4994. I see there is no column giving the total number of cases in each year under medical relief, so that we cannot get the proportion of the total cases under relief which were venereal. The only thing we get out of this return, it seems to me, which is of use, is that there were 47 unions dealt with, and that in 37 of those unions no Wassermann test was used at all, and in 10 it was used; that in 15 of those 47 unions no salvarsan was used, and in 32 salvarsan was used?—Yes, that is so.

4995. But salvarsan and Wassermann seem in many cases to be applied only very casually and in very few instances. It is not of much importance from

the point of view of showing what institutions can employ these cases?—No.

4996. Then taking these general remarks, what value do you attach to these general impressions of what goes on in a particular union?—I should attach some value to these, because the men who make them are for the most part men in large practice amongst the general population, and, as a rule, men who have been in practice for a number of years.

4997. You see some of these give a very high estimate. Gateshead estimates 20 per cent. of the population; that is high?—Yes.

4998. And Hull is still worse with 10 per cent. of the population and 70 per cent. of the young men; that is very bad, is it not?—Yes, I noticed those.

4999. Do you think we can attach value to those inferences?—I attach more value to the general aggregate of opinion than I should to any individual opinion. I look rather to the general trend of these opinions.

5000. But you would not attach any statistical value to this 70 per cent. and 20 per cent.?—No, I do not think you could make any statistical deduction from them.

5001. But your general impression, I gather, as regards the very poor is that the prevalence of the disease is not large?—No. One medical man gave a very interesting account of the proportion of the disease in his private practice, his panel practice, and his Poor Law practice, and he formerly had a very large club practice. The private practice gave a considerably larger proportion than any of the other practices. One or two other medical men make the same remark, that it is not so much the poor as the better class who furnish their experience.

5002. And that is of value as evidence in that particular case at all events?—Yes.

5003. Do the Poor Law unions of the metropolis send many venereal cases to the Lock Hospital?—Yes, a considerable number. The secretary of the Lock Hospital was kind enough to furnish me with a return of the subscriptions which they get.

5004. The subscriptions contributed by the guardians who send these people?—Yes, who send cases. But you probably would have evidence from the Lock Hospital.

5005. Yes, I do not think I need trouble you about that?—They obtain a large sum.

5006. Could you tell us about the inter-action of the Metropolitan Common Poor Fund and the indoor pauper grant which the London County Council give. What is the effect of their inter-action?—I should expect the Metropolitan Common Poor Fund in its operation would rather deter guardians from sending cases to a special hospital.

5007. Why is that?—The Metropolitan Common Poor Fund is a pooling of a fund contributed by the various unions of the metropolis in such a fashion that the richer unions equalise to a considerable extent the Poor Law rates of the poorer unions, I think to as much as 70 or more per cent. All the unions obtain repayments from that fund for all their inmates at so much per head, and they also obtain some from a grant which comes to the London County Council, 9d. per head per day altogether, and they obtain entire repayment of salaries of officers and of drugs and medicaments. But if they send a case to a special hospital they get no repayment at all; so that they would be penalised, as I gather, by sending the case to the hospital as against retaining it in their own establishment. I do not know that that weighs very much with them.

5008. Financial considerations do weigh generally with municipal bodies, do they not?—I do not know that they really do think much about it, but it may from time to time have led to an alteration of their practice. I was reading a report that Dr. Edward Smith made in 1866, in which he spoke of the Metropolitan Guardians sending very largely to the Lock Hospital. At that time apparently the Government used to reserve beds which were at the disposal of the Poor Law authorities. Dr. Edward Smith spoke of as many as 20 beds being reserved for the Greenwich Guardians.

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5009. On the whole you think this Poor Law fund may militate against sending as many people as could be sent to the Lock Hospital?—I think it may be so.

5010. What is the indoor pauper grant; how is that expended?—That is made, I think, from the Exchequer Grant which passes through the London County Council.

5011. You were a member of the Poor Law Commission I think?—Yes.

5012. Did you sign the Majority Report?—Yes, with reservations.

5013. Then there are these two recommendations, which are of considerable importance from our point of view and which perhaps we might get on the minutes. The first is: "We recommend that subject to certain safeguards against abuse, the public assistance authority should power to detain cases of venereal disease, when medically certified to be dangerous to others." The second is: "If the object be the arrest and stamping out of these poisonous ailments, caution must be exercised in not prescribing treatment so drastic as to lead to their concealment. We are, however, clearly of the opinion that whenever sufficient proof is produced that an individual is in such a condition as to be a danger to the community amongst which he or she may be living, an order for detention or continuous treatment should be obtainable." Did you subscribe to these views?—I signed the report and I agree with that, provided that the detention is not made of a penal character. I do not think it should be detention, otherwise people would conceal their cases, and it would do more harm than good.

5014. The detention to be of any use must be compulsory, must it not?—Yes, but perhaps I may take an illustration from the case of leprosy in South Africa. I was talking to the chief visiting medical officer of Robben Island lately, and he told me that the result of the present system, by which persons are segregated in Robben Island, away from their families, was that there was a large concealment of leprosy in South Africa. The Basutos, curiously enough, were becoming a pioneer nation in the matter of the treatment of leprosy, and they were going to establish a colony on family lines; at least, so I gathered from him. So that although persons could be sent there, yet they would be able to live in a more or less family way, and would not be under the deterrent conditions of such an institution as, say, Robben Island.

5015. Would not that destroy all the advantages of the segregation, which is supposed to be essential?—I am not applying the actual machinery to the case in point, but I am merely mentioning that you may have segregation under conditions which are not so deterrent as others. If the conditions were deterrent then I should be against compulsory detention.

5016. Then would you explain to the Commission what you mean by deterrent conditions?—I have heard a tradition that in old days the offending patients were dressed in canary-coloured suits. That is a long time ago. There was a stigma put upon them, or they were classed with some degraded portion of the population.

5017. But if it were simply a question of this man being pronounced a danger to society, and not fit to leave the institution until he is cured, his treatment would go on until he had been cured, there would be no stigma, would there?—Yes, but may not there be an obligation on the State to apply some pressure in another direction; that is to say, to penalise the man or the woman for remaining out.

5018. That is possible. Then on the whole you think it is a workable proposal that detention should be resorted to. Do you rely rather upon voluntary detention after the extreme importance of the diseases has been explained to the patient? Would you rather rely on voluntary detention than actual physical detention?—I should first of all look at the character of the case and the circumstances of the patient.

5019. But from the point of view of public health the only thing is the infectivity of the patient. That is the only point of view, is it not, that of health?—

Take the analogy of other diseases. The State can compel the isolation of a man with smallpox provided he cannot isolate himself. If he cannot isolate himself then the State provides him with the assistance of a hospital to which he can go. So I would be inclined to apply that analogy here. Here is a case known to be dangerous and infectious. It should be compelled to take such precautions as would be for the good of the community. If it cannot take such precautions, then there should be a place where that case can be taken and treated properly until it is safe to go.

5020. Compulsorily treated and compulsory detention?—In the sense that the isolation of fever or smallpox is compulsory. It is only compulsory if the individual cannot isolate himself. One would not necessarily take everybody to an institution.

5021. (*Sir Almeric Fitz Roy.*) You would not exclude domiciliary detention where it could be carried out?—Not at all. I regard all these hospitals as State assistance really. They merely come to the assistance of the individual in providing what he cannot provide for himself.

5022. (*Chairman.*) If the patient were not detained he might be kept under compulsory medical observation for a time?—He would have to obey certain laws and conditions; if he broke them he would be liable to whatever the consequences may be.

5023. You think that could be done?—It is done already in the case of infectious diseases in this country.

5024. Quite so, but it would be entirely new as regards these diseases, would it not?—It would be applying the old principle to the new class of disease.

5025. Anyhow, you and the majority of the Royal Commission on the Poor Law were of opinion that these recommendations should be carried out?—That was our report.

5026. That of course would entail legislation. If it is not revealing one of the secrets of the prison house, were there marked differences of opinion on that point?—I do not remember any.

5027. That was one of the few things, perhaps, on which the Commission were unanimous.

5028. (*Sir Kenelm Digby.*) The majority report was entirely separate. That is to say, it was printed in a separate form?—Yes.

5029. (*Mrs. Creighton.*) I looked to-day to see if the minority report made any statements on the matter, and I did not find one?—That is so.

(*Mrs. Creighton.*) It did not reject it.

(*Chairman.*) It did not refer to it at all.

(*Dr. Arthur Newsholme.*) My own impression is there was reference in both reports.

(*Mrs. Creighton.*) I am not certain. I looked into it as far as I could, but I am not certain.

5030. (*Chairman.*) (*To the witness.*) It is clear that if the remedies you propose are to be carried out, legislation would be required?—Yes, certainly.

5031. Have you formed any opinion on the question of notification?—No, I have not thought over it specially. I always hold with regard to notification that if the State requires notification, it should provide some remedy or refuge for the people who would otherwise suffer by the notification.

5032. As regards the people who come under the operation of the Poor Law, there is nothing confidential at all. Their diseases are all registered, and it is known they have these diseases. There is nothing confidential about it?—Some people hold that the cases of people who come to Poor Law institutions should not be made public gossip. I saw an article in one of the papers a little while ago in which a man professed to have been in a position, although he was a pauper, to reveal the confidential contents of the case papers of the inmates. Whether that was true or not I do not know; but I think the general feeling is that the private affairs should not be revealed because necessity has brought people to the rates.

5033. Are you opposed to compulsory notification of the disease to local authorities, for men and women alike, and all classes alike?—I should not be opposed if provision were made that nobody should suffer in consequence of that notification.

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5034. It would be rather difficult for such a provision to be made, would it not?—If they suffered unduly they obviously would tend to conceal the disease. They would go to quacks and chemists.

5035. Then as regards the registration of deaths, do you think it should be amplified by expressing in much greater detail that certain deaths occur from syphilis as the prime cause?—I have not considered that point.

(*Dr. Arthur Newsholme.*) I have no questions.

(*Mrs. Burgwin.*) I have none.

5036. (*Sir John Collie.*) You told us of some difference between the returns of a medical man with regard to his panel practice, his private practice, and his Poor Law practice. How do you account for the difference?—I only have the statement that the gentleman made, and I do not know that I should be justified in divulging his name. It is a letter in which he states these things.

5037. And apart altogether from the identity of the individual, do you gather in any way what was the cause of the difference in the incidence of the disease in the different departments?—No, I think he made no statements beyond the numbers he gave.

5038. (*Rev. J. Scott Lidgett.*) Do I understand you to advocate making the Poor Law infirmaries the chief means, or one of the chief means, of stamping out or of treating venereal disease?—I should be myself disposed to make the Poor Law machinery one of the chief agencies.

5039. In order to stamp out the disease throughout the community as a whole?—By the assistance given to the people suffering from it.

5040. I understand you to say that the Poor Law is only available for those who have need of it because of their necessities, or because their need of medical relief is beyond their means?—Yes, the latter being the larger class for medical relief.

5041. That we may take as the basis, if not of law, at any rate of administration?—That is so.

5042. You spoke just now of poorer ratepayers who contend that because they have paid rates all their life they have a right to medical treatment. Do not the guardians take pains to dispel this impression?—I suppose it would depend on the practice of the individual board of guardians.

5043. And if they are lax upon this subject, does not the Local Government Board call attention to their laxity?—I do not think the Local Government Board is very stringent in its criticism of the guardians in regard to medical relief.

5044. But have not you and your colleagues on occasion had to deal with boards of guardians who were in danger of treating Poor Law infirmaries as general hospitals?—I do not recollect any occasion when I have had to do so.

5045. But it would be within your knowledge that on occasion there is a very serious straining of the law and regulations under Poor Law Orders, in treating a good many of these cases of sickness where the patient cannot possibly be treated as a pauper, or as having need of the bare necessities of life?—The absence of institutional treatment for the people of small means forms a very great difficulty against any very hard administration of the Poor Law rules.

5046. That is to say, I take it, that the Local Government Board is bound to wink at undue elasticity in the administration of the Poor Law where ordinary hospital accommodation is defective?—I do not think I should admit the words "undue elasticity," if it were a case where a man was in serious need of institutional treatment, and could not get that treatment in any hospital or from any means of his own, although he may be not in need of ordinary necessities.

5047. But so far as the underlying principles of the existing Poor Law are concerned, it needs a good deal of stretching by Local Government Board administration to sanction these more generous ideals, does it not?—Perhaps you are alluding to the feeling of the doctrine or policy which grew up under the Commissioners of 1834, that the condition of the man in receipt of relief must not be better than the man on whom he depends; that is to say, the hanger-on must

not be better off than the man on whom he hangs. With regard to the class with which the Commission of 1834 had to deal, the able bodied healthy class, who were a great danger to the nation at that time, that principle is a very true one. But when you come to deal with medical questions, first of all I say the Commission of 1834 never really worked that out. Their intention had been, I believe, to develop a system of voluntary medical relief through clubs and friendly societies; but that never came to a head eventually, so, as I said at the beginning, there has been as yet nothing more than custom and practice to guide us in these questions of medical relief.

5048. So there is a constant tension, if I may say so, between the underlying principles of the 1834 Poor Law and the more generous ideals which we are trying to draft on these principles?—That is so; the principles of 1834 having been rather applied to another class.

5049. And there is great difference of administration sometimes, perhaps, at the Local Government Board, but certainly among various boards of guardians, as to the way in which they find a solution between these two ideals?—I should think it is extremely probable. You have two motives which are not altogether coincident with one another, and they must clash.

5050. As a matter of fact, the guardians, in their duty to the ratepayers at the present time, feel themselves bound somewhat to restrain the use of the Poor Law infirmaries rather than to extend their use?—I should not say that of a number of the London guardians. One has rather feared once or twice that the poorer inhabitants of the union have been rather squeezed out of the infirmary.

5051. I say there is a tendency to do that in the interests of the ratepayers?—I do not quite follow you.

5052. If I may put my question again; I say that many boards of guardians in their duty to the ratepayers feel bound rather to restrict than to enlarge the use of their infirmaries?—I think they would be quite right in giving preference to the poorest. They have not room for all in some cases, and in that case the poorest should have the first chance.

5053. Therefore, any extension of the use of Poor Law infirmaries to cover the case of any man or woman, no matter what his means, who suffers from venereal disease, would involve a very great extension of what we may call the more generous ideals of administration?—If you were to provide for all of them, certainly.

5054. Would it not be such an extension as to involve the breakdown of the Poor Law system as we know it at the present time?—Speaking personally, and not as an official of the Local Government Board, my own views have long been that the whole system of public assistance needs reorganisation.

5055. May we take it that your suggestion, that this should be made a principal means of dealing with these diseases, rather points to the theory of the minority of the Poor Law Commission than the majority?—I do not at all agree with the theory of the minority of the Commission, unless it was carried out in a thoroughly bureaucratic manner. I do not know that I can go into the question of the Minority Report; but obviously if you break up the departments of public assistance, you must have some connecting link between them all, otherwise there would be nothing but chaos, and the connecting link under that system could only be a very highly bureaucratic organisation.

5056. You speak of the poor in your experience having no reluctance to use the Poor Law infirmaries?—I think there is no reluctance in London.

5057. Whom do you mean by the poor?—I mean not only the lowest of the low, but I mean people who are of the better working class and the small tradesman class.

5058. Would you say that the better working class and the small tradesman class and the small clerks have no objection to coming to Poor Law infirmaries?—Certainly, not to some of them.

5059. If I might venture an opinion, I was chairman of a large infirmary for nearly 15 years, and my experience is diametrically opposite yours on that point?—This is not my opinion. I merely saw this

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casually this morning. This is the Charities Digest: "Since 1867 the Poor Law infirmaries have become hospitals; and in construction, medical treatment, and nursing they now take a high place. At the same time the poor draw a distinction between the infirmary and the workhouse, and have no scruple in entering the former."

5060. I presume that in some stages of convalescence the practice of the guardians is to send infirmary patients back to the workhouse in order to make room for more urgent cases in the infirmary?—They object to that, I think.

5061. But it is the practice?—That is so; but they generally take their discharge, I believe, in those cases.

5062. And the present provision is totally inadequate to maintain patients in these diseases or in others in a state of convalescence?—Yes, there is no room for them.

5063. Then may I take it that with some sections of the population there is a stigma in having recourse to institutions that are associated with the Poor Law, and may involve transference to an obviously Poor Law institution—the workhouse?—I have no doubt some would regard it as a stigma, but I think that feeling of stigma is very rapidly disappearing in London.

5064. There is also a stigma, is there not, resting upon the sufferer from a venereal disease?—Yes, I suppose there is.

5065. Would not your proposition, understanding it in the full length of it, involve the double stigma, the addition of the Poor Law stigma to that of a sufferer from these diseases?—I do not think so, because my suggestion, as you put it, is based on an assumption that the whole system of public assistance is reorganised from that at the present time.

5066. Then we may take it your proposals this afternoon involve the total reorganisation of the Poor Law in its administration?—In their full completion they would.

5067. You speak of an outdoor relief circular which was issued about four years ago. Do you refer to Mr. Henry Chaplin's circular?—No, a circular issued after the Poor Law Commission reported on Poor Law out-of-door relief.

5068. In what sense can compulsory detention be said to be not deterrent. I mean if a man wants to go out and seek to earn his living or join his family, must not any form of compulsory detention be deterrent?—Compulsion must always be deterrent. But my point is that the compulsion must be made as little deterrent as possible. A great deal of that would depend on the way you treated the person when you have got him.

5069. In view of all the difficulties in the way of totally reforming the Poor Law, ought we not rather to seek that the Poor Law infirmaries should be made thoroughly efficient for treating these diseases in the case of those who at present have recourse to them, rather than making them the resort for all members of the community, whether paupers or not, who suffer from them?—I do not think I proposed they should be made the resort of all members of the community.

5070. I thought I understood you to say they were to be the chief means of stamping out the disease?—Yes, in this sense, that they are the predominant basis of public assistance at the present time. There is no hospital where provision is made, but I have never proposed the Poor Law institution should be thrown open to everybody.

5071. (Dr. Mott.) You referred to a comparison between the infirmaries and the general hospitals. I have been over many infirmaries, and I find the wards are nicely kept and well cared for. The only thing I should compare unfavourably would be the number of patients to each medical officer. Could you tell us what the number is?—I am afraid I could not give you the aggregate off-hand, but as a rule a large infirmary would have a superintendent medical officer and three assistants.

5072. And each assistant would have some hundreds of patients?—He may have two or three hundred under the supervision of the chief medical officer, but generally

the existing medical provision would be inadequate for any systematic treatment of these particular diseases.

5073. That is what I thought; as compared with the general hospitals it must be so?—Yes.

5074. Then with regard to the treatment by salvarsan, salvarsan is an expensive drug, and would the guardians raise objections to your use of such an expensive drug, do you think?—They would raise no objection in London.

5075. Not at any of the infirmaries?—For one very good reason, that it does not fall upon their pockets; it falls upon the whole of the metropolis and half of it is paid from the Exchequer Grant.

5076. That is a very good reason. Then with regard to the Wassermann reaction, you said that it was necessary to be conservative in regard to such a reaction. May I take it, it is your opinion that the reaction is not reliable or is not altogether valuable yet?—Not at all. I do not think I said it was necessary to take a conservative view, but that I rather supported a conservative view in cases where men were not quite satisfied.

5077. In what respect, may I ask?—Because sometimes mischief may be done by people who do not thoroughly understand the principle of a new method of diagnosis, and more particularly a new method of treatment, by their adopting it before it is quite safe for them to do so. Take a case in point. I should be very sorry to see radium used wholesale by everyone at the present moment.

5078. May I take it that you do not think the Wassermann reaction stands upon a firm enough basis yet to decide whether treatment should be given or not in the case of serious illness?—Personally, I should think it did. Of course, you are much more competent to give an opinion on that than I am.

5079. With regard to the Wassermann reaction, I may say, that previous to its use we could only diagnose 75 per cent. of the cases of general paralysis that were admitted to the asylums. Now we are able to diagnose every case, and we have confirmed those observations by post-mortem examinations, so that I am quite satisfied with regard to that disease it is a most valuable and an absolutely reliable test?—Yes, I believe we have very few other diseases in this country which give any reaction to it. Is not that so?

5080. Yes, a very large proportion of active disease will give the Wassermann reaction?—We have, for instance, no laws.

5081. No, but that is not quite the same thing. In my own hospital practice every case that I suspect I have tested by the Wassermann reaction, and if I find a positive reaction, I say, this is a clear indication for me to treat syphilis, sometimes with the very greatest benefit; I never wait, and if I find the Wassermann reaction disappears under treatment then I know I am doing good. I think you would find that was the opinion of nearly any physician in London associated with a general hospital?—I think perhaps you misunderstand me. I was only trying to convey to the Commission what I gathered from going through the returns which we have received as the general opinion of the profession. The majority of them seem to be, as you say, thoroughly satisfied; but there are one or two who are not quite satisfied.

5082. I would admit there are many people going about who do not know they would give a positive reaction who feel quite well and apparently are not suffering. But if they did know they would give a positive reaction, or if the doctor knew it, he would be quite wise in treating them to prevent future disease?—I am quite willing to take that.

5083. Then with regard to payment for the Wassermann reaction, you say that the infirmary doctors can send specimens of blood to the Clinical Research or the Wassermann Institute?—Most of them have arrangements in London. I have a list somewhere. Some send to the Wassermann Institute and some to the Clinical Research.

5084. But they only send a few relatively?—They do not send very many.

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5085. They have not made any systematic examination of all the admissions with regard to the Wassermann test?—No. The amount that is done would depend, of course, on the particular medical superintendent.

5086. Whether he insisted on it?—Yes, whether he was keen on it or not.

5087. I have found from experience that so much depends upon the interest and the proportion of cases that you get. When I was appointed to Claybury, out of 953 admissions in one year three were supposed to be caused by syphilis. I suggested to one of the medical officers that he might make inquiries, and next year 48 out of the 600 odd admissions were attributed to syphilis. So much depends upon the interest and energy shown by the medical officers in investigating the question. That I suppose you have found from your own experience?—Yes, quite, it depends entirely on the personality of the man.

5088. (*Mrs. Scharlieb.*) Is it not the fact that you have a great many unfortunate young women who come into the workhouse infirmary to be delivered of their children?—Yes, and a number of the domestic servant class. One infirmary acts as maternity ward for the Lock Hospital. The Paddington Infirmary takes the lying-in cases from the Lock Hospital.

5089. Is not that a very good opportunity for testing the blood of the mothers, and also of the infants born, with the Wassermann reaction, with a view of instituting proper treatment for them?—Yes, I think it is very desirable that it should be done.

5090. We have heard from a former witness there was a large proportion of syphilitic disease among these unfortunate girls, who are very young, and whose lives and health are so well worth saving?—Yes.

5091. If you had a rather larger number of medical officers, would not it be practicable to take the blood from the umbilical vein and the placenta there, and also get blood from the mother, and to treat them?—Yes, I think there would be no difficulty in having that done, because there is every facility. Even if the test is not made at the institution, it can be sent to another place to be done. There should be no difficulty whatever, and it is most desirable.

5092. You agree it would be valuable evidence?—Yes. Of course a considerable number of these cases do not need the Wassermann test, for the simple reason that it is sufficiently obvious what is the matter with them.

5093. In that case you would treat them with salvarsan at once?—That is so. There is a good deal of salvarsan used in proportion to the amount of Wassermann diagnosis which is adopted.

5094. (*Mrs. Creighton.*) I notice in this table that at such large towns as Bristol, Hull, Newcastle-on-Tyne, and Devonport there is neither Wassermann test nor salvarsan used. Is there any power in the central authority to suggest to the medical officers of such infirmaries that they should use these things?—There is no power beyond suggestion.

5095. Is it a sort of thing that would be done if it were suggested to them?—I think undoubtedly. I should assume that if any authoritative sentence from a report of such a Commission as this could be taken it would be circulated and made the basis of a recommendation.

5096. Then in the figures given I see that the number of tertiary cases far outnumbers the primary and secondary. I suppose these are cases of paralysis and old people who come to the infirmary wards, rather than people with the beginnings of the disease?—I do not think the tertiary cases would necessarily be of old people. They are cases in the more advanced stages of the disease. They come to the Poor Law because the sufferer has broken down and has lost his employment.

5097. It looks as if you got a very small number of those who are in the primary stage?—Comparatively few.

5098. Then to return for a moment to the maternity wards, at the ordinary infirmary in the maternity ward would there be venereal cases as well as other cases?—In the early stages they are put into side

wards, isolation wards. The tertiary cases would be in general wards, just as they are in many of the hospitals if they are taken in.

5099. With the other maternity cases?—No, not necessarily in the maternity wards.

5100. I am talking now of the maternity cases and the venereal maternity cases. Are they all in the same ward?—I do not know what the accommodation of these country workhouses is. My experience is limited to London.

5101. How is it in London?—In London they treat the separate lying-in cases according to the character as much as they can, but they cannot always do it.

5102. With regard to the instruction given to nurses, you spoke of a case of the infection of a nurse. Is special instruction always given to nurses as to how to avoid infection?—I think it is one of the earliest lessons that is given to the probationer in her training, how to safeguard herself.

5103. And especially from this infection?—Undoubtedly, because, of course, she is bound to come across it in every stage of her work.

5104. Some nurses tell one that the instruction is very inadequate. We have heard that the vagrants and tramps are very syphilitic as a rule. What is done in the vagrant wards as regards the treatment of the vagrant?—I do not think the evidence I have goes to show that they are very syphilitic. I do not get much information of venereal disease amongst the real vagrants. A good many cases come from the common lodging-houses, but comparatively few from the casual wards.

5105. In the casual ward, would all the clothing and everything used by a vagrant man or woman be thoroughly disinfected before use again?—I think in the metropolitan casual wards it would certainly be. If the man's case was a bad one, he would be taken to the infirmary.

5106. Then as regards detention, you say you are in favour of compulsory detention; but I gather your view is it should be as pleasant as possible, so that people should not shrink from it?—What I first suggest is that the State should put some pressure on a man to isolate himself. If he does not isolate himself, or if he cannot provide isolation otherwise than by the Poor Law, the Poor Law would isolate him; but in its isolation it should not so treat him as to make his condition repulsive or deterrent to his going there.

5107. It seems to me this stands absolutely apart from all other diseases. The State cannot be sure that the man will isolate himself; he can spread his infection in the way it is most commonly spread, without anyone knowing?—That would apply to a case of small-pox.

5108. Not in the same way. In small-pox you can insist upon isolation; the man stays in his own house and uses such measures as are necessary. If a man is in the primary stage of syphilis he goes about, he goes to his work, he meets women, and he meets his own wife. How is the State to see that he does not spread infection?—I am afraid that is one of the problems before the Commission.

5109. I agree; but in what you were saying just now you seemed to imply that the man could be told to keep from spreading the infection in the same way as he could if he had small-pox or some other malady. It seems to me to be absolutely different. The man, to all intents and purposes, to everybody who sees him, when he is in the primary stage, is like an ordinary human being, and behaves as such probably?—Yes.

5110. You said if the State could be assured, as in the case of small-pox, that the man would observe the proper precautions, he might be allowed to go about; that is to say, the well-to-do man with small-pox can be allowed to go about. How about the well-to-do man in this case—how could the State be assured that he took proper precautions?—It is a question for the State to consider penalties.

5111. But surely it would be absolutely impossible for the person injured in most cases to pay the penalty?—Yes, of course, we are in the dilemma of having to avoid any measures that would cause these people to

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conceal the disease. The great object, of course, is to attract them to be cured.

5112. That is why I was asking you how you could explain why any form of detention would not diminish their willingness to come and be cured, and surely detention of any kind is more likely to weigh upon a girl rather than upon a man. A girl comes in with very pronounced disease, and with the man, if you have not even got the Wassermann test, it may not even be detected, and yet he is in a much more infective condition than the girl?—Yes.

5113. How can you make that apply equally?—I am afraid it is a very difficult problem which you have before you.

5114. I know; but I was simply asking you because you had pronounced yourself in favour of detention. I thought you must have thought out how that detention could be carried out. If detention could be carried out; if people could be persuaded to stay till they are cured, we should all be in favour of it; but compulsory detention seems to me to be the difficulty. That is all I have to ask.

(Mr. Lane.) I have no question.

5115. (Sir Almeric FitzRoy.) On that point of detention, am I to understand that prior to the establishment of the Public Assistance Authority, which was the dream of the Royal Commission, you advocate the present Poor Law authority being entrusted with any such power?—For those persons who cannot make any provision for themselves otherwise.

5116. You would do that?—It would have to be so. There is nothing else apparently.

5117. That is the alternative you would adopt, rather than let them go unwatched and uncared for?—Yes. If a man needs isolation or needs treatment, and there is no other provision for him, then necessarily the Poor Law, such as it is at the present time or such as it may be, would have to be resorted to.

5118. You think that could be done effectively?—It would be an assured resort. The merit of the Poor Law is that it is the assured refuge of the destitute, whatever the destitution may be.

5119. (Sir Kenelm Digby.) I want to ask you one more question about this report. The report recommends power to detain cases of venereal diseases when medically certified to be dangerous to others. Does the report at all show how that medical certificate is to be obtained? Does it deal with that question?—I do not think the Commission went very much into this matter. A number of witnesses expressed the opinion that these cases should be detained for treatment.

5120. Still, here is a very serious proposal, made by a very important body. I should like to know what was in their minds, if I could.

(Mrs. Creighton.) They do not amplify it in the report at all.

5121. (Sir Kenelm Digby.) Then let us just see how it would be applied. Take the case of a loose-living man in an infectious state who spreads this disease wherever he goes. How would you touch him?—I am afraid I have not gone into the matter at all.

5122. Does not it come to this, that you could only act on this recommendation where you had already got the person under some control, in prison or in some way, where you could have him or her medically inspected?—I think what the Poor Law Commission had in their minds was the class of person who had to come to the State for assistance. Their view was, as I remember, that that assistance should be given subject to conditions. The question of conditional relief was very much to the front, and one of the conditions might be that certain powers of detention could be exercised in this particular class, and those powers of detention should be exercised carefully.

5123. Then it leaves it altogether to the upper classes and higher classes, and classes who have not to come for detention?—We were not concerned, of course, with that class, unless they choose to resort to the State.

5124. But this recommendation is a general one, that they were to have power to detain any person who is medically certified to be dangerous to others. The

instance I just gave is evidently that of a person who is dangerous to others; it would not touch him for our purposes?—It only refers to persons who are already inmates of Poor Law institutions.

5125. Where you have some control over them?—It refers to the Statute which was partially repealed by the Lunacy Act of 1890, namely, 30 & 31 Vict. Ch. 106, s. 22.

5126. Still, where you are dealing with a case which affects a particular class, and not all classes, this is hardly a recommendation.

5127. (Chairman.) Power is only proposed to be given to the public assistance authority?—I do not think it should be extended beyond the limits of the intention of the Poor Law Commission.

5128. It was never contemplated. The man who got fresh treatment and was found by medical diagnosis to be diseased was to be detained to be treated until a cure could be effected; that is all?—That is so; as a condition of his relief.

5129. (Sir Kenelm Digby.) Then it was never suggested at all as a general thing?—No, certainly not.

5130. (Sir David Brynmor Jones.) I understand you have put in a table, a "Summary of Returns furnished by Medical Officers of the undermentioned Unions" as part of your evidence?—That is the return which was obtained by the Local Government Board, I believe.

5131. But you are an officer of the Local Government Board?—That is so.

5132. Was this table prepared for the purposes of this Commission?—I understand it was.

5133. What do you mean by "understand"? On whose authority is the table put forward?—I suppose it is on the authority of the Local Government Board; but, as I explained at the beginning, I am only the inspector of the metropolis. This large table relates to the provinces, with which I am not directly concerned, and of which I know nothing unless the case is particularly referred to me. I have put in this as a table which has been obtained by the Local Government Board; but beyond the facts in the table and the papers on which it is based, which I have here, I have no direct knowledge.

5134. Who handed the table to you?—It was handed to me by the assistant secretary, Mr. Symonds.

5135. Was it, so far as you know, prepared by the assistant secretary for the purposes of this Commission?—Yes, I understand it to be so.

5136. Was it prepared from returns which were already in the office before the Commission was appointed?—No, all these returns are furnished since the appointment of the Commission.

5137. So may I take it that before the appointment of this Commission the Local Government Board was not in possession of any information as to the prevalence of venereal diseases either on the part of casual paupers or of indoor paupers?—No, that would be quite wrong.

5138. A wrong inference?—Yes, absolutely wrong.

5139. Why?—Because in the first place a special return was obtained for the Poor Law Commission, and secondly a return was obtained, which has been already put in to-day, by the Poor Law inspectors throughout the whole of the country.

5140. What was the date of that return?—1st July 1911, I think it was.

5141. Then is this table, so far as you know, prepared from those old returns or upon returns obtained for the purposes of this Commission?—Is it this table you mean?

5142. I mean the table "Summary of Returns furnished by Medical Officers of the undermentioned Unions"?—"Cases of Venereal Disease in Poor Law Establishments. Summary of Returns furnished by Medical Officers of the undermentioned Unions."—That return was made for the purposes of this Commission.

5143. If it had given a date it would have been better described and have been done in a more business-like way, and I should not have had to ask some of the questions I have asked. What is the date of it? It

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must be after 1911, because in the paper before me the population is given according to the census of 1911, so I assume the returns came in after the census returns?—Those were all obtained within the last two or three months.

5144. If they were obtained within the last two or three months, they would be returns made after the Commission was appointed?—Precisely so.

5145. May I ask whether, apart from the appointment of this Commission or the appointment of the Poor Law Commission, to which you have referred, the Local Government Board had ever taken any steps to ascertain the statistics about venereal diseases in the various union areas?—They have obtained returns of sickness from time to time, but I cannot off-hand answer the question as to whether venereal disease was specially mentioned amongst them.

5146. I am not attacking you; I only want to know what was the state of information in the Local Government Board before the appointment of this Commission, or before the appointment of some body like it?—I think I may meet your point by referring you to an answer I gave to the Poor Law Commission (I was a witness as well as a member of the Commission), to the effect that medical statistics had not been put on a proper footing at the Local Government Board.

5147. They were not on a proper footing at the Local Government Board before the appointment of this Commission, at any rate?—I think you might go further and say that there were no sufficient and adequate medical statistics in regard to Poor Law administration at the Local Government Board. I think we are quite in agreement on that point.

5148. With regard to this table, I should like a little explanation as to its structure. Who is responsible for the framing of this summary of returns furnished by medical officers in the office?—There I am afraid I am not able to help you. I do not know.

5149. One reason why I ask is this, that I see "Average number of cases under treatment." That heading is all right; but then you give gonorrhœa; then by its side I find the heading "Syphilis," and underneath that you have primary, secondary or tertiary syphilis. What is the meaning of tertiary syphilis in the table? An answer you have given indicates that your view of the table is, it is those which naturally occur in the individual in the course of the normal development of the disease?—Yes, the more advanced cases.

5150. Would you include locomotor ataxy under the head of tertiary symptoms?—They call those cases parasyphilitic diseases or quaternary syphilis.

5151. We may take it, then, that the word "tertiary" is used in its ordinary medical signification?—Quite so.

5152. And that it excludes parasyphilis and diseases consequent upon syphilis?—Yes.

5153. Supposing a man comes to the workhouse and is taken in as a casual suffering from locomotor ataxy, do you know anything about the ordinary treatment given to him? How is he treated?—That would depend on the different institutions. The medical superintendent of the Fulham Infirmary could give you very good evidence on that point, because he has paid special attention to it.

5154. In the London area now is that done? Some man comes in casually, and upon inspection it is found that he is suffering from locomotor ataxy or that he is about to suffer from it; what happens to him?—You mean in the infirmary?

5155. He comes into the casual ward, I am supposing?—If a man comes to the casual ward and is ill, he is taken to the infirmary and treated as one of the ordinary patients of the infirmary, according to the views of the medical man in charge of that infirmary.

5156. And that applies to all the other diseases which are the consequences of syphilis, such as general

paralysis of the insane?—Yes, those would go to an asylum, if certifiable.

5157. You say you are the inspector only for the London district, and perhaps, therefore, it may not come within your purview, but I want to ask you about this table. I take the case first of Kingston-on-Hull, a borough of about 79,000 inhabitants. In the columns "Whether Wassermann reaction is used" and "Whether salvarsan or neo-salvarsan is used," in both cases the answer is "No." In the last column of all it is said: "10 per cent. of population; 70 per cent. of young men; foreign seamen responsible for introduction of certain proportion of the disease." Does the Local Government Board, when it gets information of that kind before it, give any suggestions to the guardians as a matter of habit in the office?—I am afraid I must refer you to the assistant secretary for an answer on the policy of the Local Government Board.

5158. Then it is no good my asking you about any of the other returns, I suppose? Take the case of Swansea, a borough with 150,000 inhabitants?

(Chairman.) Union?

5159. (Sir David Brynmor Jones.) Or union. There the exact area is no relevant part of my question; but I want to know what view the Local Government Board has taken of its functions in the past. In regard to Swansea the answer to "Whether Wassermann reaction is used" is "No," and the answer to "Whether salvarsan or neo-salvarsan is used" is "Yes"?—Yes, I have the original return here.

5160. Are these varying answers due entirely to the exercise of discretion by the medical officers of health or the boards which they advise, or has the Local Government Board anything to do with it at all?—They are the replies of the medical men in charge; the Local Government Board has nothing to do with their replies except to ask for them.

5161. Am I to take it that in the case of no disease at all the Local Government Board gives advice to unions, or directions or suggestions?—The Local Government Board takes no part in the treatment of disease, it merely controls the appointment of the officers.

5162. Naturally not; just as the Home Office does not take any part in the case of the prisons, but it is continually sending advice to recorders and judges. I want to know whether the Local Government Board takes upon itself the giving of advice to boards of guardians?—As to the treatment of disease?

5163. As to the diseases at all—or does it give them any hints?—The Local Government Board has certainly communicated hints to guardians. In my capacity as inspector a good many years ago I issued a circular on ophthalmia neonatorum, simply enclosing an extract from a Royal Commission which had sat on the question of the blind. I simply circulated the recommendations of the Royal Commission, and the result of that was to reduce the amount of ophthalmia neonatorum about 50 per cent. almost immediately. The Local Government Board subsequently issued a similar circular for England and Wales.

5164. Has the Local Government Board ever issued any circular of any sort or kind as to venereal diseases?—I could not answer that question; I do not know of any.

5165. (Canon Horsley.) In workhouses at the present moment there is no very adequate separation between the place in which respectable married women are confined and that in which lock cases are put, is there?—Not as much as one would wish.

5166. Take my own case, with which you are familiar. We had one building in which we had married women confined and those not married as well. That you think undesirable, of course?—Quite so; I should like to see more separation.

(Chairman.) We are very much obliged to you.

The witness withdrew.

Dr. E. B. SHERLOCK called and examined.

5167. (Chairman.) You are medical superintendent of the Darenth Industrial Colony?—Yes.

5168. How long have you been there?—About one month only, in that capacity.

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[Continued.]

5169. What is the matter with patients that come to the colony. What is their general position and status?—We have all grades of mental defect, from idiocy to feeble-mindedness. A certain number of them are uncertified cases, not sufficiently defective to be certified. But the majority of them are certified under the Lunacy Act.

5170. They are all mental cases of one kind or another?—Yes.

5171. Have you made a special study of the relation between mental defects and venereal disease?—Not specially, but incidentally.

5172. But you are doing that now?—Yes, as the occasion arises.

5173. At the beginning of your note, you state that the question as to which is the prior occurrence, that is to say, [whether the mental defect has been first, before the syphilis appears, or whether the syphilis has been first, and the mental defect appeared afterwards, is the determining principle?—My point was rather that in some cases it may be difficult to say which was the cause and which was the effect. You find the two things associated, and you cannot be quite sure what the relation is in that respect.

5174. But the priority of the cause, if you could be certain of it, would generally settle the question?—Yes, as regards that point.

5175. Then you say that mentally deficient persons are more likely, from ignorance and pressure of economical conditions, and perhaps from deficient moral sense, to contract these diseases than if they were mentally sound?—Yes, I think that is so.

5176. Therefore you would expect the larger proportion of these mentally defective persons might suffer from acquired disease?—Yes, but perhaps not those found in asylums to any great extent. They would be the less marked cases which would be likely to contract disease.

5177. Of course you discriminate entirely between congenital cases and acquired cases?—Yes.

5178. An important thing in considering the people who come under your treatment at the industrial colony, would be to ascertain their parentage and whether there is any taint in their parentage?—Yes. In cases such as I have to do with, acquired syphilis would be an extremely rare thing.

5179. Very rare?—Yes.

5180. Then you have come to the conclusion that gonorrhœa from the mental point of view is of little consequence?—Yes.

5181. You are satisfied on that point?—Yes.

5182. You say that syphilis is different, although there is a wide diversity of opinion as to the extent to which that disease is responsible. That means, I suppose, that some medical opinion considers a much larger amount of mental defect arises from this disease than others do?—Yes.

5183. Then you say syphilis is capable of producing abortion, still-birth, and death in early infancy, and of course, as you are aware, several other things as well?—Yes.

5184. From that it is a natural inference that when mental defect is observed in a child suffering from syphilis, the syphilis has a causal relation to the mental defect?—Yes.

5185. Then you qualify that. Will you explain your qualification?—My point was that you cannot be sure in such a case. It does not follow because a congenitally defective child is suffering from congenital syphilis, that the mental defect is due to the syphilis.

5186. But suppose you got a family history in which there was no trace of mental defects in early generations, but that one of the parents had syphilis or a syphilitic taint, and the children were mentally defective, in that case you would say the causation was clear?—That would greatly strengthen the presumption that the mental defect was due to syphilis.

5187. Then you allude to the wide diversity in the results obtained by different observers. That means due, I suppose, to the methods they employ?—Perhaps so, as regards the more scientific methods like the blood test. But as regards the clinical method, it may be dependent on different facilities for observation.

5188. As regards the diagnosis, from that point of view, the earlier general clinical methods, I presume, were much less trustworthy than those that we now have at our disposal?—Probably; but the point was that the earlier clinical methods could not always be applied as extensively as the circumstances demanded.

5189. Then you do not admit that the present tests, that is to say, the microscopic and the Wassermann tests, are superior to anything that went before them?—I would not express an opinion on that, but possibly they are.

5190. Very possibly?—Yes; I do not think the matter is settled.

5191. Anyhow, you would not allow comparisons to be made between cases where the clinical evidence was employed only with cases where the Wassermann or microscopic tests were made. You would not regard such cases as being directly comparable?—No.

5192. You refer to Dr. Tredgold's book on mental deficiency. What is the date of that book?—I think it is 1908.

5193. He speaks of his examination of over 1,000 idiots and imbeciles of varying grades in Darenth Asylum, and he tells us he found only about 0·5 per cent. among them where the condition could be attributed only to syphilis. Did he use only the Wassermann or the microscopic test, or did he rely solely on clinical observations?—I have no personal direct knowledge. But, as far as I know, Dr. Tredgold was not on the staff of the Darenth Asylum, and at the time he made his examination the Wassermann test was not generally employed. I think in all probability his results were based merely on casual observation on certain visits which he paid. I cannot be positive about that, because I have had no communication with Dr. Tredgold.

5194. Do you know whether Dr. Tredgold made any investigation of the family history of these cases?—I cannot say.

5195. Broadly speaking, you take it we may reject all those results as of little or no value?—Yes.

5196. Then coming to the records of the Metropolitan Asylums Board, they show that out of 3,261 direct admissions into the Board's asylums during the five years 1908 to 1912, 114 cases presented some evidence of syphilis; that is a little over 3 per cent. Do you know on what the evidence of syphilis was based in those cases?—There, again, I have no direct personal knowledge; but I believe that papers of inquiry are sent out as a matter of routine to the relatives, and that the statistics are compiled from the evidence obtained in that way.

5197. In quoting and making use of any percentages of this kind, is it not of special importance to find out what the method of test was that was relied upon in bringing together those statistics?—I have not followed that up any further; because if you look at the figures actually given in the annual reports of the Metropolitan Asylums Board, you will see they vary very widely indeed from year to year, and that fact alone to my mind makes them not very trustworthy, and I do not attach a great deal of importance to them.

5198. In 140 cases of which you have made a fairly exhaustive study, you found 25 instances, that is 17·85 per cent., in which syphilis in one or other of the parents might reasonably be assumed. Will you state to the Commission what steps you took in making that analysis?—In the first place I saw the immediate relatives, the parents, as a rule, and usually the mother, and I put to her the usual questions that one employs in searching for evidence of syphilis. I judged from the answers, and from the manner of answering, and sometimes from information casually dropped. I did not put it to the people directly that they had syphilis or "has your husband had syphilis"; but I judged from the history they gave, taking all the circumstances into consideration. In one or two of the cases where the evidence so obtained was negative, there was in the case of the child itself fairly positive evidence. That is to say, in a few cases where a history was denied, a positive Wassermann reaction was obtained.

5199. In the child?—In the child. In a few cases the clinical picture which the child presented was

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itself sufficient to justify diagnosis of syphilis in spite of the statement of the parent.

5200. You were not able to obtain the blood of the mother, and to test it?—No.

5201. In no case?—No, not in any of the cases that I have had.

5202. Nor to make any clinical examination of the mother?—No, there was simply the history.

5203. So that your Wassermann reactions were only taken in the cases of children?—Yes, some few of the children referred to.

5204. Not all of them?—No, not nearly all; just a few.

5205. At any rate, you say that in many of those cases there was a family history not only of syphilis, but also of mental defect?—Yes.

5206. Do you mean that that family history of the ancestors, or of the generation before, was both syphilitic and mentally defective?—The mental defect was obvious, sometimes from the people who were giving evidence, that is to say, in the parents themselves, to whom I applied for information, or there were cases in which other members of the family were inmates of the asylums.

5207. Then you do not know whether that congenital syphilis might have been syphilis in the parents?—No, I do not know; but from one's experience of syphilis, it does not usually pass on to the third generation in a way to make that likely.

5208. Then you give a number of foreign results which are mostly very low. Can you tell us how those results were taken?—These are all Wassermann reactions, chiefly by German physicians.

5209. In every case?—In all the earlier ones. Two of these sets of figures were the work of English doctors.

5210. Do you know whether the different sets of people who are called feeble-minded people here were comparable? I do not know whether collections of people were examined?—I should think from what I have seen in German asylums they were fairly comparable with our own class.

5211. But you see the differences are very very large?—So they are.

5212. Does that mean defects in the test, or that the people tested were quite different in quality?—I think in the early stages probably it was a question of the test. The test is a very complicated one, which is not well understood. The technique has varied very considerably during the time it has been employed, and I have no doubt the earlier results were at any rate less trustworthy than the later ones.

5213. When you come to the Wilhelmstift Asylum for Idiots at Potsdam, it is 15.4?—Yes.

5214. The other figures we have had have been very small, so that we must receive all those with a certain amount of suspicion. Then we come to Dr. Leslie Gordon, who examined the blood of 400 patients in the asylums of the Metropolitan Asylums Board. He got from cases ranging from 3 to 20 years of age a percentage of 18.8, while for those over 20 years of age a percentage of 12.8, the average for the whole number being 16.5. Those come rather closer to your results?—Yes.

5215. And they are more likely to be approximately right than any other results that you quoted?—I think so, from my experience.

5216. You say the divergencies in the results are probably referable to variation in the opportunities for clinical investigation, and in the case of the Wassermann reaction to the complicated technique involved. That means that where you think the Wassermann reaction was applied, there were differences in technique which destroyed the comparison?—Yes, there were differences undoubtedly.

5217. Then you say as regards the Wassermann reaction, there is a general agreement that the positive result diminishes as the patient gets older?—Yes.

5218. That means, I suppose, if the patient is untreated?—Yes. There is no evidence that the patients were treated.

5219. Turning to the special types of mental defect, you do not find that any special type sets itself along-

side the syphilitic cause, and it is distinctive?—No, except to this extent. It is the very bad cases—the idiots of the lowest grade—who are most likely to give evidence of syphilis.

5220. Dr. Gordon's experience was that epileptics showed a percentage of 21.5 and non-epileptics only 13.3?—Yes.

5221. That would appear to show that where there was no epilepsy, the cause may have been something else?—The point was rather this, that perhaps you get relatively more epilepsy, and also more evidence of syphilis in the lowest grade cases.

5222. In the same way, where there is paralysis, you get a percentage of 31.4, and only 11.2 where there is no paralysis?—The same thing applies there. It is the lowest grade cases that have relatively more paralysis among them.

5223. You have tried anti-syphilitic treatment with mercury and with iodide of potassium?—Yes.

5224. And you say that produces no observable effect on the mental state?—Not in my experience.

5225. The mental state is not affected at all?—No, I see no reason to think so.

5226. Though it may have some value, you say, in the case of bone and skin lesions. Have you tried salvarsan in any form?—No, not at all.

5227. You have no experience of it?—No, none at all with salvarsan, or neo-salvarsan.

5228. (*Sir Almeric FitzRoy.*) I want to ask you whether your experience confirms a statement which has been made to us, that the incidence of syphilis is highest in the second decade of human existence?—No, I do not know that that is so. Do you mean congenital syphilis?

5229. Congenital or acquired?—I should certainly say that it is not true of acquired syphilis. Possibly it might be, if you take the end of the period.

5230. Of course, it is greater towards the end?—The tendency which is displayed in the results of all observers, I think, is that as the child gets older, the evidence of syphilis as proved by the Wassermann test becomes less.

5231. With regard to the difference between epileptics and non-epileptics, one showing a percentage of 21.5 and the other 13.5, do you think experience is pretty uniform among the investigators into the matter?—I have no other figures to compare as regards that.

5232. Because in a paper that was submitted on behalf of Dr. Rhys Thomas in connection with the East Sussex Asylum at Ardingley, he stated that the result of his inquiries was that in the case of epileptics it was 11.36, and in the case of non-epileptics only 10.25, a very slight difference?—Yes; but I think you would not have very many cases there.

5233. He is generalising from too small a number of cases?—If he confined himself to the congenital cases of the Hellingly Asylum, there would be quite few I should think. That is an ordinary county asylum.

5234. (*Mrs. Creighton.*) Is it your habit to test the blood of each child with the Wassermann?—No, it is not; it is quite a recent investigation undertaken last year.

5235. And in the case of the mother of the child, you say you would never test her blood. Have you ever asked her whether she would allow it?—No. I believe Dr. Gordon was able to get a test in one or two cases.

5236. But you do not know whether there would be any unwillingness to allow it?—No, I cannot say from my personal knowledge.

5237. Then it seems to me that in comparison with statements we have heard made, the percentage of cases in which we find traces of syphilis is low. Should you say it was much higher amongst idiots than it would be if you took a number of ordinary children of the same social class?—No, I am not prepared to say that. I think it is higher.

5238. But it would not be so very much higher?—No, probably not.

5239. (*Mrs. Scharlieb.*) Have you taken any family histories with regard to the number of miscarriages,

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[Continued.]

premature births, and still-births of children who show signs of disease either at infancy or later on with keratitis, deafness, and so on?—Yes, that is the line on which I went. It is with regard to those points one does get some information which the parent is able to give without recognising that she is committing herself; but I have not the details now. They were taken chiefly at the Belmont Asylum, where I was engaged a few years ago. It is on that line that questions were asked.

5240. (*Dr. Mott.*) Can you tell us whether you have seen a paper, "The rôle played by syphilis in mental deficiency and epilepsy, a review of 205 cases," by Kate Fraser and H. Fergusson?—Not recently. I do not remember it.

5241. It was published in 1913?—I have not seen it.

5242. They find a very high percentage indeed that give a Wassermann reaction. You refer to Dr. Tredgold's observations, and you said he found only 0.5 per cent. ?—Yes, so he says in his book.

5243. Do you agree with that from your own clinical observations?—I do not know what he did.

5244.—You said it must be rather a casual observation?—I should think so.

5245. What do you regard as clinical evidence of congenital syphilis?—The form it usually takes is the presence of notched teeth and eye complications.

5246. What sort of eye complications?—Keratitis, and the presence of nebulæ.

5247. Do you not think you often get choroidal retinitis, which can be discovered only by the ophthalmoscope?—Yes.

5248. I have seen many cases; in fact, when I went to Darenth I saw cases showing choroidal retinitis; and unless the examination was made you would miss that?—Yes. My point was that unless careful examination was made, usually much evidence would be missed.

5249. Then with regard to the Wassermann reaction, you have done it only in a few cases where it was suggested to you that there was negative evidence?—The position is that at the Fountain Asylum, where I was then superintendent, Dr. Gordon collected blood from about a hundred patients, and the tests were made by him. I selected many of the cases for him, but the actual tests were made by him.

5250. Are you aware that I applied to the Metropolitan Asylum Board for permission for Professor Dean, who was then working at the Lister Institute, to come and do the Wassermann?—Yes, I have heard that you did.

5251. Can you tell me why the application was refused?—These are questions of policy that I ought perhaps not to speak of. But probably the main reason was that the Board had its own pathologist, and there was in prospect this very examination, which was shortly afterwards made by the Board's own medical officers.

5252. It was not because of any objection to myself or Professor Dean?—I think you can be quite certain about that.

5253. Professor Dean had been working with Professor Wassermann in his laboratory, and his results would have been of very great value indeed?—They would.

(*Dr. Mott.*) I was rather surprised that the investigation which he began at Darenth on a few cases was suddenly stopped.

5254. (*Sir John Collie.*) Are you carrying on these investigations there now?—No, not at present.

5255. Are arrangements being made for them?—The matter is being discussed by the Board. I think nothing has been done at the moment.

5256. With regard to the Wassermann test, are you aware that practically the whole of the diagnosis of syphilis in the army and navy is now founded on the application of the Wassermann test alone?—I do not know, but I think it is quite likely.

5257. You will agree, will you not, that the Wassermann reaction is a valuable aid to the diagnosis of syphilis?—Yes, I think that is so.

5258. And I suppose you would not dispute the statement that it is the most valuable method of diagnosis at present available?—No, I would not dispute that.

5259. But there are no facilities at present in your institution for its use?—No.

5260. (*Mrs. Burgwin.*) I am not quite sure of the age of the patients you now have at Darenth. Are you speaking of the children's department only?—The cases I have referred to in my evidence here were not cases at Darenth. Some were at the Fountain Asylum, some at Caterham, and some at Tooting Bee Asylum. Those are the ones in which the Wassermann test was applied. Of those I examined from the point of view of the history, some were at Belmont Asylum, and some were at the Fountain Asylum.

5261. So I understand this statement of yours does not refer to Darenth. The results were not obtained at Darenth?—No.

5262. I think you said you had been at Darenth only a month?—Yes.

5263. Then it is almost useless to ask you about the classification of the higher grade cases at Darenth. You have a higher grade of mental deficiency, have you not?—I dare say that I could give you any information you wished to have.

5264. I wanted to see whether you were able to tell us in that classification you have at Darenth, if the percentage of syphilitic children was grater in your higher grades, or in your idiot department?—No, I cannot tell you that. That point has not been gone into.

5265. And, of course, in the children's department you would not get what I should call the ordinary infected cases, would you; they would be the congenital cases?—Yes, I think practically all would be congenital cases.

5266. And you could not give us any idea of the actual percentage of syphilitic amongst those at Darenth?—No. I think it would be lower than at the other places, because of the better class of patients. It would certainly be lower, but I could not tell you exactly what it would be. I have not as yet had any opportunity of investigating as to the percentage from that point of view.

5267. You mean it would be a lower percentage in the higher grade child?—Yes.

5268. But you have also the idiot at Darenth?—Very few. There are practically none left there now.

5269. Have you cleared all the idiots out?—Yes, there are just a few, but the rest have been transferred to the Fountain Asylum chiefly.

5270. Would it be possible for us to get reliable statistics with regard to the condition of these higher grade mentally deficient in Darenth, for the use of the Commission?—It depends what evidence you want. It will mean examining some 1,500 people, and the taking of a Wassermann test of those, of course, would be a very costly undertaking. Then, as regards the family history, it would be a very lengthy proceeding to get anything out of any value.

5271. But it would surely be a very valuable help to this Commission, because we are told that the blind, deaf, and mentally deficient are largely in that position from syphilis?—Of course I cannot estimate what the value of such information would be to the Commission, but I daresay further work could be done if the Commission should desire it.

5272. Do you think that the cost of the Wassermann test might be considered by your committee if we asked for this examination of, say, 1,500 of your patients?—I think it is an aspect of the matter that would appeal to them, certainly.

5273. I think it would be such a very valuable return. If the costs were provided, do you think there would be any objection to taking the Wassermann tests?—I could not speak for the Board in that way; but probably not, in view of the fact that some of the work has already been done. They are familiar with the idea now, at any rate.

5274. (*Dr. Arthur Newsholme.*) I notice that you were very cautious in suggesting any causal relationship

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between the presence of congenital syphilis and the occurrence of mental defect?—Yes.

5275. But from your own observations from these two asylums, you found that in 13 per cent. of the children there was a history of congenital syphilis of some probability?—Yes.

5276. If, similarly, 18 per cent. of those children had had red hair, you would not have suggested any causal relationship between red hair and the occurrence of mental deficiency?—Probably not, and I am not suggesting any relationship here. I am just giving the facts.

5277. I know; I am not suggesting you said that. But I take it you will give us the advice that we must be very cautious indeed in assuming that because in a certain percentage of mentally defective children there was a history of syphilis, that syphilis is the cause of mental defect?—Yes. I say one wants to be very careful about that.

5278. How could one proceed further, to make it more probable that there was causal relationship between the 18 per cent. of syphilis and the occurrence of mental defect?—In some of the cases where you get obvious bodily defects which are in the nature of signs of syphilis, and where, again, you find in the post-mortem some evidence of syphilitic lesions, in such cases I think you are justified. If you find, for instance, a gumma of the brain, you are justified in thinking that has something to do with the disturbance of the brain function.

5279. But in a child that dies of pneumonia you might find similar syphilitic lesions, and yet no mental defect?—Yes, possibly.

5280. Would not the best method be to have a large sample of the non-mentally defective population of the same age and sex, and find out what the percentage of syphilis was among them?—It would be.

5281. If one could do it?—If one could do it.

5282. If, for instance, one found that in the general population of the same age and sex there were say, 2 per cent. syphilitic, whereas among the mentally defective themselves there were 18 per cent. of syphilitic, then a much more probable case would be made out, would it not?—Yes.

5283. But in the absence of this check observation, it is very difficult indeed to infer from the 18 per cent. of syphilitic among the mentally defective that the syphilis was the cause of the mental defects?—Yes.

5284. (*Chairman.*) What classes do these children come from?—They are all paupers.

5285. (*Dr. Mott.*) Have you gone into the question of heredity in these pedigrees?—To the extent I have spoken of just now; that is to say, I have inquired as to whether other members of the family were insane or feeble-minded. Sometimes from the mode of answering it has been obvious.

5286. You would rather imply a history of epilepsy in the parent or a history of insanity, as the cause of mental defect, rather than syphilis, which was a coincidence?—Yes, I should associate those with the conditions rather than syphilis.

5287. And then you would admit that the condition of the poisoning of the blood might increase the possibility of that?—Yes, that is a possibility.

(*Chairman.*) Thank you.

The witness withdrew.

FIFTEENTH DAY.

Monday, 2nd February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIER, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. HELEN WILSON called and examined.

5288. (*Chairman.*) What post do you now hold?—I hold no official position. Do you mean an honorary post?

5289. Yes, any honorary post?—I am the honorary secretary of the British Branch of the International Abolitionist Federation. It is in connection with that that I originally studied this subject.

5290. Do you practise now?—No, I have not practised for some years.

5291. When did you give up practise?—About 10 years ago.

5292. You say you have made a study of methods of prevention in many countries. That means you have studied all these subjects in books and papers, and collated them, and brought your mind to bear on them in order to enable you to form opinions?—Yes.

5293. You have come to certain conclusions as to the most hopeful lines of work for stopping the

ravages of syphilis and gonorrhœa. That, of course, is the main object with which this Commission has been brought together?—Yes.

5294. You say you have a general knowledge of the accepted modern views as to methods of diagnosis and treatment. Do you accept these modern scientific methods?—Yes.

5295. But you do not propose to offer evidence upon them, because you have not been brought personally into contact with them?—Not to any great extent.

5296. Your interest is directed rather to the sociological and administrative aspects. I think you know we cannot enter into a sociological inquiry on this Commission; but what you call the administrative aspects are of the greatest importance to us. You lay down two lines of general attack which the Commission must consider; the first being measures

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applied to diseased persons in order to prevent the communication of disease by them to others, and for that method you give isolation hospitals and foreign quarantine as examples?—Yes.

5297. You say it is now generally recognised that it is quite futile to attempt for venereal diseases such isolation as is practised in regard to acute infectious diseases. You mean that it is impossible or impracticable or impolitic; not that if it were possible you would not isolate people who were in a dangerous condition?—Yes, I mean that it is impracticable.

5298. Quite impracticable?—Yes.

5299. But if there were power, and that power could be reasonably exercised, to isolate people at the time they were dangerous, you would not object?—No, I think not.

5300. The reason you give is of course a very true one: that these diseases at their most infectious stage do not prevent the sufferer from following his avocation and also that they are easily concealed, and there is a strong motive for concealment. You mean by that that the patient can go about and that nobody looking at him can know he is a dangerous person, and therefore that differentiates him from other patients who have infectious diseases which would be discovered at once by their disability to do anything?—Yes, broadly speaking, the one statement is not true of every instance of these diseases, nor the other of every instance in small pox; but broadly speaking it is so.

5301. That is the principle upon which you rely, and on which you say it is futile to start isolation?—Yes.

5302. Now we come to your objects. Firstly, to bring every sufferer under efficient treatment at the earliest possible moment, thereby shortening the infective period; and, secondly, to secure his own intelligent co-operation both for his own cure and for the protection of his associates. Those you say are the really important points in this particular connection?—I believe so.

5303. At present I gather that you consider the health administration is not in a position to secure these objects in regard to willing patients?—No.

5304. That the institutions in one way or other, in method and treatment are defective and inadequate?—Very much so, I think.

5305. And your opinion is that until you have the means of providing such treatment, you have no right to enforce it upon anybody. I think there can be no doubt as to that?—Yes.

5306. But on the other hand, assuming that the facilities were available in sufficient quantity and in a state of adequate efficiency, would you then object to any pressure being brought to bear upon people to use them, or would you trust entirely to the patients becoming willing?—I do not think there is any objection in principle to such compulsion in the case of these patients more than in others, provided it is as impartially applied in these diseases as in others.

5307. Then assuming that sufficient facilities were to be had and that absolutely impartial treatment of all classes and both sexes were applied, you would not see any inherent objection in principle to some form of pressure being brought to bear on people to use those facilities?—Not if it is likely to be efficacious. I think what you mean is there is no moral reason against it.

5308. You see no moral reason?—I see no moral reason. I think even then the question of practical reasons would need much consideration.

5309. Obviously, but you do not think it would be any unreasonable restriction of the liberty of the subject to bring pressure to bear in such cases?—No, not more than in the case of other diseases.

5310. But I understood you build your hopes upon voluntary measures?—Yes.

5311. Is it not a fact in regard to other infectious diseases, that if we had relied upon voluntary methods with regard to them they would have spread far and wide?—I think if you look into it, you find the greatest reduction in the mortality from most of these diseases occurred before there were any compulsory measures. I have a few statistics here on that if you would care for them.

5312. I think they would be very useful?—This is the net death rate per million in England and Wales for certain diseases taken from the Registrar General's Reports. I begin with typhus and enteric, which used to be classified together until about 1870. I might remind you that the compulsory notification over the country in general did not come into force until 1889, though in a few places it had been introduced somewhat earlier. The mortality from phthisis and enteric together between 1861 and 1865 was 921, I will leave out the decimals; by 1871 to 1875 it had come to 400; between 1881 and 1885 it had come to be 238. After that, one gets the effect of compulsory notification; and in the period I took here, 1901 to 1905, it had come down to be 113; that is to say, that the reduction was going on, roughly speaking, quite as rapidly before notification as after.

5313. Do you deduce from those figures a general proposition that the issue of orders making these diseases compulsorily notifiable has not increased the rate of their diminution?—It is rather difficult to generalise about all these diseases. Certainly in those in which the diminution has been most remarkable, I should say that the compulsory notification has had a comparatively small effect in that diminution. As to the rate, it is difficult to say. For instance, one finds in the case of diphtheria that notification appears to have had no effect whatever.

5314. Can you give us the figures for diphtheria?—Yes. From 1861 to 1865 it was 247; 1871 to 1875, 120; 1881 to 1885, 156; 1891 to 1895, 252; and 1901 to 1905, 204. It actually went up after the introduction of notification.

5315. It rather went up?—Yes.

5316. You say generally that you do not think compulsory notification will ever be of material help in diminishing these diseases; on the other hand, you think it will be a positive hindrance. Would you explain your views in regard to that?—In regard to not being a help, I think one may take the analogy of measles in this respect. The compulsory notification of measles has been tried in a great many towns, and wherever it has been tried it has been given up because it was found that it did not help to reduce the spread of measles or the mortality. It is at the early stage that measles is most infectious, and it is the same to a large extent in regard to the maladies we are considering. Another way in which they are similar is that among the poorer classes measles is very often not treated by a doctor at all, and in that respect again it presents an analogy. Of course, in most other respects measles is very different from venereal diseases. But it seems to me probable that in them notification would prove as useless as it has proved for measles. Notification is only of value if it can be followed up in the case of any of these diseases. I think that is understood.

5317. I think we all agree with that; that notification would be perfectly useless unless it led to prompt measures being taken to deal with it when the disease was notified. What you wish to impress upon us is, that although compulsory notification is enforced already for certain diseases, that does not imply that, but for that notification the disease would not already diminish?—Quite so.

5318. In other words, the case for this compulsory notification was never properly made out?—No, I do not think I should say that.

5319. You would not go quite so far as that; but supposing anyone had been asked to instal this compulsory notification and he had your figures and argued from them, "Here is a falling rate of mortality; if it goes on, the disease will disappear;" would not he have said, "Why bring in legal obligations when everything is going so satisfactorily?"—We need to have clear ideas as to what the purpose of notification is. One use is for the collection of statistics. If the statistics help one to trace out the source and the cause of the disease, then notification may be of very important use in finding the conditions of life which are tending to spread that disease or in telling one where and how to look for them. I take it that where notification has been of use, that is one

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main reason for it; for example, to find the connection of enteric or scarlet fever with the milk supply. In that way notification has been an important help in tracing out what I may call the conditions of life that favour the spread of disease, in order that these conditions of life may be eliminated. Of course, another object is to educate the public in the seriousness and preventability of the disease in question. No doubt, it is a help in that respect. But I think in the case of these diseases that can probably be attained better otherwise. Lastly, another object in notification is to secure the isolation of patients, and I consider that that cannot be done in this case.

5320. Then you tell us that the reason why notification of diseases has been accepted so willingly in this country is, because people now recognise that the steps which follow up notification very rarely inflict hardship on the sufferer, but are usually as much for his own benefit as for that of the community. Would not that apply quite equally to venereal diseases?—In the present conditions it would not, as I have already said, until we can offer something which will confer benefit on the sufferer.

5321. Assuming that adequate facilities were provided for free treatment, we might take it from you that people would be just as willing to be notified in the case of these diseases as they have proved to be in the case of other diseases?—No, I do not think so.

5322. Why? The reason you give here is that notification very rarely inflicts hardship on the sufferer. But in the case of the facilities we are considering, they would not inflict hardship on the sufferer, would they?—Yes, I think they would. It is at present certainly an injury to anyone to assert or have it known he is suffering from one of these diseases in the way that it is not an injury or hardship in the case of any other disease. Further, notification may interfere with him not merely in his friendships and home relations, but may interfere with his livelihood. In the case of other diseases, the acute fevers, it does not interfere with his livelihood because that is interfered with by the disease itself. In this case that is different; the only analogy is with tuberculosis.

5323. But is not this hardship, if it may so be called, inherent in the nature of the disease, and suppose we give treatment, would it be possible that the nature of the treatment and the reason for it being given should be concealed. Would not, therefore, this hardship always arise in the case of these diseases, or can the whole thing be managed in secrecy?—I think in many cases the whole thing can be managed in secrecy, though not in every case.

5324. Have you considered the question of the detention in all free institutions of patients who are in an infective stage of the disease? Do you consider that would be reasonable?—I think the chief objection to it would be that it would keep patients from coming in. I do not know that one could put any serious reason against it, in the case of patients already in. But I do not think it would tend to the public health.

5325. Because people, feeling detention might be hanging over them, would refuse to go to public institutions?—I think all experience shows that is so in the case of these diseases.

5326. As regards the rights of the community, you would not deny the right of the community to say that a patient known to be infective shall not go forth and spread the disease?—No, the community has that right, but if it enforces that right in regard to some, it is only fair that it should enforce it on all, else you give the idea that all dangerous persons are secluded, and if they are not, you are giving a false security.

5327. You say (and other witnesses have brought it to our attention) that a large number of cases, probably the majority at the earlier stages, are never seen by doctors at all, but only go to chemists and herbalists. You regard that as a great danger?—Yes.

5328. It has two effects, it seems to me; first of all, it increases the difficulty of an after cure, does it not?—Yes; the disease is not got rid of and therefore the late consequences are apt to be much more dangerous.

5329. It tides over the time when medical advice properly applied can be most efficacious?—Yes.

5330. Therefore that is a danger?—Yes.

5331. Then the patient is infective for a longer time and that increases the danger to public health?—Yes.

5332. Can you make any suggestion for modifying this plague of quacks?—I think you can only deal with it by offering the public something better and by convincing them that it is better. At present, I think, the medical profession in general has not the confidence of the public in this matter in the same way that the Army and Navy medical officers have the confidence of their men. The public think that these diseases are trivial, and that any kind of treatment will do. Many of them also think that these diseases are not only too trivial but also too shameful to bring under the notice of a professional man, and that makes them timid about going to a doctor. I think also it is possible that some traditions about the old severe mercurial treatment linger in the public mind and frighten patients away from the doctor; a great many quacks make a great point of not giving mineral remedies.

5333. I believe those sum up fairly well what may be called the attractions of quackery?—No, I should not like to say that. I think it is a very difficult and complex phenomenon, the attraction of quackery. I think those are factors, but whether they are all I could not say. Of course, there is the thing constantly said, that they are ashamed to go to a doctor; but if it was only shame they would simply go to a strange doctor instead of their family doctor; it would not account for their going to quacks.

5334. How do you think the State by means of its institutions can successfully compete with quacks?—When you say "the State," you mean public institutions in general?

5335. Public institutions helped by the State?—I think it would be desirable to do something similar to what has been done in Denmark and in Italy in the way of greatly facilitating treatment in public institutions and perhaps making such treatment free to all patients. If this question were taken up by the State in the same way that tuberculosis has been, something similar might be accomplished.

5336. You tell us that you object to notification because you see difficulties arising in notification for the purposes of isolation and treatment. But do you agree to any proposal of compulsory notification of a confidential character for statistical purposes?—I see no objection to it except that I think it would be useless. I do not think one would get reliable statistics by that method.

5337. In your pamphlet I notice you say this: In Denmark doctors have for many years been required to notify all cases for statistical purposes without name and address. Then you go on to say, "as might be expected, the removal of the motives for concealment which are inevitable under regulations, coupled with the provision of free dispensaries, produced a considerable increase in the number of cases under treatment." Would not that be an advantageous result?—Yes, it would; but the statistics in Denmark being without names are not reliable. About a year ago it was clearly shown that a very large number of cases of syphilis (my correspondent says fresh syphilis, but I suppose she means new cases) were notified twice over at least; about 60 per cent. of these new cases were sent into hospital and of those the great majority were notified twice over, first by the doctor who sent them in, and afterwards by the hospital doctor; this has made the statistics in Denmark appear much higher than they ought to be. That, I understand, is now accepted, and a new method has been adopted in order to avoid this overlapping. But one sees that in confidential notification that must be a source of fallacy. Even when notification is with names, there may be overlapping. I understand that a great many cases of tuberculosis in this country are notified, perhaps, half a dozen times over. Of course, with a good deal of work, when the names are given, they can be traced out.

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5338. Then it looks as if in Denmark the case is overstated; whereas, here we know all our statistics with regard to venereal disease are understated; but in Denmark you think they have gone to the other extreme and are exaggerated?—I understand that is what is thought now.

5339. Still, you do make the statement that the result of this notification for statistical purposes has been to produce a considerable increase in the number of cases treated?—No, I do not think notification has anything to do with the increase of patients treated.

5340. Then I am afraid I do not quite understand your sentence?—The present system of notification in Denmark of these diseases without names has been in force for nearly 50 years. The thing that has produced a considerable increase of cases notified was the introduction in 1906 of new arrangements, providing free treatment for every sufferer; it was coupled with the enactment that no one having once come under treatment was to cease the treatment till he got the doctor's permission. But there was no change as regards notification.

5341. But, for one reason or another, we may take it that a considerably larger number of people go for treatment in Denmark now than did formerly?—It is only this morning that I got the explanation of this fallacy that has been proved, and I have not had any opportunity of comparing the figures or seeing how they would bear on the question you put.

5342. You think it would be advisable for us to examine into the Danish statistics?—I think it would be very advisable indeed. I may say that they have one part of their system which seems to me to be very doubtful; that is the penalising of people who cease treatment. It means that there is a fear of the policeman always in the background which might prevent them going to get treatment in the first instance in some cases.

5343. I suppose fear of the policeman operates also the other way, does it not, that is to say, it may frighten people into going to take treatment?—So far as I understand, there is no penalty in Denmark on people who never get treated at all.

5344. It is only if they begin and do not go on?—It is only if they begin, as I understand it.

5345. That seems a distinct flaw. As regards the voluntary measures intelligently tried against tuberculosis in this country, you say you would like to submit some facts to us?—I think there are lessons to be learned in this connection from tuberculosis. In the first place, I believe that where notification was introduced, as it was in Sheffield, without providing any special facilities for treatment, the results were found to be unsatisfactory until they did supply treatment. On the other hand, I have some particulars that have been furnished to me as to the result of voluntary methods in inducing patients to come for treatment as contrasted with compulsion. I have been furnished by Dr. Hilda Clarke, the late assistant medical officer of health for Portsmouth, with some information relative to the work done there against tuberculosis by voluntary methods, and also some particulars about the results of a private dispensary conducted by her at Street, Somerset. At Portsmouth there is a municipal dispensary, where patients are seen either on their own application or when sent by doctors. They receive diagnosis, advice and specialist treatment (tuberculin), but are referred to their doctors for ordinary treatment of symptoms. Great pains have been taken to secure the confidence and friendly co-operation of the general practitioners. There is no doubt that at the present stage of public feeling, this course allowed the dispensary officers to diagnose and secure treatment for many early cases who would not otherwise have sought it till a later stage. The tables show the extent to which the dispensary was used in its two functions, that of providing consultative treatment and that of securing cases for prophylactic and curative treatment and for hygienic education who would otherwise have escaped. The table shows that in the 6 months before the introduction of compulsory notification there were 699 patients in all, of whom 58.5 per cent. were sent by doctors;

28.6 per cent. were under doctors but not sent by them and 14.9 per cent. had not been a doctor since the symptoms appeared. The introduction of compulsory notification made no perceptible difference in the proportion of attendances. Dr. Clarke adds: "I have no means at present of estimating the number of cases who failed to secure any advice or treatment through delay or mistaken diagnosis on the part of a doctor in whom they have placed confidence. The histories obtained at the dispensaries would suggest that it is large, and though it would not be fair in any given case to trust a patient's report of what diagnosis and advice a doctor really gave, it is clear the most urgent matter is to keep the standard of the general practitioner's work as high as possible." The special point was that every attempt was made to co-operate heartily with the doctors, but help was not refused to cases who were not under a doctor or who were not quite satisfied with their doctor.

5346. Then with regard to this institution at Portsmouth, you deduce from it that notification brought in no more cases?—No more, as I understand.

5347. Does the result of your studies lead you to suppose there is any special reluctance to let the existence of tuberculosis be known?—I know that when there is public notification without the provision of facilities for treatment, it has inflicted hardship and it has frightened a certain number of people away, because in some cases it means the loss of occupation.

5348. In that sense it stands almost on all fours with venereal disease, does it not?—Yes, I was told the other day of a doctor (I am not sure what town it was) who said "when compulsory notification of tuberculosis was first introduced I notified my patients; but when I found out that they got nothing by it and only got inspectors coming about and frightening them, I left off notifying."

5349. Have you studied at all the incidence of gonorrhœa?—I have heard from many gynaecologists of the immense amount of suffering and ill-health and sterility that are inflicted on women by gonorrhœa. This applies very largely to married women infected by their husbands. Such statistics as I have been able to get before this Commission began seemed to show that while syphilis was diminishing, there was no equally clear evidence of the diminution of gonorrhœa, I am inclined to think that the reason of it, or part of the reason, is this: that the public in general, the man in the street, knows that syphilis is a danger, and not to himself only. He knows it is a danger to his wife and future children. He does not know it in regard to gonorrhœa, and I think one reason why he does not know it is because a good many members of the medical profession are themselves unaware of the seriousness of gonorrhœa in the case of women. This fact, of course, has only been known at all for some 30 years, and I believe that a number of general practitioners are not aware of it, and they do not become aware of it as they would in the case of syphilis, because when the wife begins to be troubled with the effects of gonorrhœa, the general practitioner sends her to a specialist or to a women's hospital; he does not follow up the case and never has the opportunity of connecting it with the ailment from which as he may or may not know that the husband suffered some years before.

5350. This points, does it not, to a serious flaw in general medical education in this country?—In regard to those who got their education more than 30 years ago, it does not point to anything of that sort; it was not known then.

5351. The modern educated medical man ought to have at his disposal all the facts as to the serious nature of this disease?—They ought to have, but I do not think that the gynaecologists and the general practitioners have ever come together enough on this subject.

5352. But the facts and figures are now to be had by anyone who is interested in or dealing with this subject?—Yes.

5353. And it could be shown that this disease is most serious, especially to women?—Yes, certainly.

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5354. Now in regard to the organisation of medical treatment, you say it is time to abolish the hard and fast line which has been drawn between these diseases and all others. By that, do you mean the hard and fast lines in hospitals and institutions?—Yes.

5355. How would you abolish that line?—That must be partly done by the education of the public; partly, no doubt, it could be done by government encouragement of treatment in these institutions. I understand that hospital boards always say that they dare not make any change for fear of their subscribers. I think they are probably a good deal more afraid of their subscribers than there is any need to be.

5356. You mean that no hospital which undertakes the treatment of disease on a large scale ought to refuse these cases, or ought to be unable to treat them?—Yes, I think I mean that.

5357. In other words these diseases should be put on exactly the same footing as all other diseases from the point of view of treatment?—Yes,

5358. Then you go on to say, as with other diseases the only passport to institutions should be the fact that the sufferer is unable otherwise to obtain the medical care that his case requires. Is not that so now in all institutions which will take these diseases? We know there are some that do not?—I think most voluntary institutions refuse to take them, and in the public institutions, the Poor Law institutions, where they cannot be refused, they are not put on the same footing as other patients. For instance, in a good number of Poor Law unions the wards for these diseases are not in the hospital at all; they are in the workhouse where they get less skilled nursing at any rate, if not less skilled medical attendance.

5359. Would a person known to be suffering from one of these diseases be simply taken into the workhouse and not specially treated?—I can tell you of one workhouse I know where the female Lock ward is in the hospital, but the male Lock ward is in the workhouse. Since the introduction of salvarsan there have been some differences made; but previous to that there was one male ward only, known as the "dirty ward," where they took these cases as well as those of scabies. They were under the care of the workhouse doctor and not the hospital doctor, and it practically was not hospital treatment at all.

5360. You say that admission and treatment ought not to be conditioned by inquiries as to the method by which the disease was contracted. Are such inquiries made now when anybody seeks admission for treatment of these diseases?—A good many hospitals require some statement that the patient seeking admission is respectable, or some such expression. I think in what I said I was referring to proposals that have been made for establishing hospitals for special classes of patients, classified according to their morals.

5361. You are opposed to the allocation of special wards for treating these diseases?—That is a question of hospital administration, on which I do not feel qualified to express an opinion.

5362. But you are strongly against labelling hospitals, as Lock and Magdalene?—I think it distinctly deters patients from coming in.

5363. Then, on the whole, your evidence on that point is, that hospitals should treat these diseases in exactly the same way as other diseases, with only such discrimination as the interests of the other patients may require?—Yes.

5364. But the treatment generally is to be on exactly the same lines, and as liberal and as comfortable as in the other cases?—I think so.

5365. Wherever these diseases are treated in the future?—Yes.

5366. You support what Mr. Lane has told us about the importance of evening hours for out-patients?—Yes.

5367. You would establish, I suppose, in connection with hospitals, a sort of evening dispensaries at which these people could attend out of their working hours?—Yes, as has been done so largely in France.

5368. Then you lay stress on the education of patients about the danger of their malady. You know,

of course, that is done now in the case of all military patients?—Yes.

5369. But you think it is not done in the case of civil patients?—No. In a great many cases it is not done.

5370. And you think that every patient should either be told in so many words or should receive a plain printed statement putting before him all the dangers which these diseases incur?—Yes, and I think the printed statement has a great advantage at the moment when the patient gets the diagnosis he is not in a condition to take in all that he is told by word of mouth.

5371. You would make that a rule in all hospitals or institutions which treat these cases?—Yes, I should try to get it adopted by private practitioners by also supplying them with similar papers.

5372. You say that there is no better or less objectionable way of diffusing the information—which is so much needed—as to the dangers of these maladies both to the sufferer and his family. Would he be likely to let his family know he is in possession of this information?—That would depend a good deal on the person. I do not know exactly what I did say.

5373. I only mean I am rather afraid his family would not get this information from him, because he would most particularly conceal the fact that he has been treated for one of these diseases. I was rather afraid you might exaggerate the possibilities of educating the public in that way; that is all?—I think one ought to give every possible help to the conscientious sufferer who does wish to save his family; and although the majority might not, some would undoubtedly in this way protect their families.

5374. Have you considered the question of foreign quarantine? Do you think that more stringent measures could be taken to prevent the entrance of these diseases at the ports?—I do not see how you can; it seems to me impossible.

5375. I suppose in very obvious cases the inspecting medical officer might say "No," might not he?—Yes, I suppose so.

5376. We do not know exactly yet what is done; we are going to get information. Of course there is a power of rejection in regard to certain diseases?—Yes.

5357. And there is medical examination?—I have read something about that question being raised in the United States about immigrants: but I have not thought about it in this country.

5378. Now I come to your second set of proposals, and that is the protection of the whole community by the inculcation of a true sexual hygiene. Have you devoted much study and thought to that very important question? Taking first the medical students and the nurses, do you think that they are sufficiently well instructed?—No. Until the last few years there were very few nurses who were told even enough to protect themselves if they had these cases to nurse.

5379. At all events that is capable of remedy, and I suppose nobody can dispute the duty of teaching nurses and medical students. There is no difficulty about that?—No, there is no difficulty, they ought to be taught not merely the pathology, how to avoid disease, but they ought to have some teaching as to the physiology and hygiene with regard to sex.

5380. Now I come to children, lads and girls, and I notice in the papers this morning a schoolmistress has got into terrible trouble at a place called Dronfield in Derbyshire, because she had explained these things to her senior girls before they left school. Do you not think there might be a great outcry on the part of parents if these subjects were talked over?—Yes, I think that the parents and the teachers need preparing to do it. I do not think the teachers in general or the parents are quite ready for it, and I think the first step is to prepare them.

5381. Do you think this instruction should be given by teachers, or by qualified medical practitioners?—I think it is much better when it is possible, that the teacher should do it, chiefly because it seems to me desirable that it should not be disconnected or disjointed from the rest of the school course. I think

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the ideal thing is that it should be taught by the parents, but the school will hinder the parents' efforts if it does not deliberately support them. The difficulty is that the majority of teachers, like the majority of parents, are unfitted and unprepared to do this work. Conscious of their own unpreparedness, they have tacitly agreed to leave aside this whole region of life, and it has become in the child's world an aching void, a barren region untilled, and consequently full of weeds and rubbish. But it is of little use to demand teaching for children until there are teachers to give it, and it is highly important to do what I believe a few training colleges have begun, namely, to prepare teachers for doing it. Some use should also be made of the opportunities offered by mothers' meetings, men's meetings, and so forth, to prepare the parents for this same thing.

5382. So that at the first stage you would only deal with the preparation of teachers and of the parents?—Yes.

5383. Grown men or mothers. You would not at this stage begin with the children or young people under instruction?—Not unless one knew in a particular school that both the teachers and the parents were ready.

5384. You say that instruction of this kind should be, as far as possible, co-related, or even interwoven with other subjects of instruction. I do not quite understand what that means?—I think a mistake has been made often in talking about moral education as if it was synonymous with biology, and that mistake is likely to lead to disappointment and reaction. Biological instruction can never make any individual moral. All it can do is to remove misapprehension and to open up a field in which moral principles responsibility, justice and self control may be applied and exercised. These moral principles themselves may indeed be instilled in the biology lesson, but they may equally be instilled in the reading lesson, the history lesson, the scripture lesson, and the playground. That is what I mean; that with a teacher who is prepared, the best way would be not to give systematic instruction on these subjects, but to use the opportunities that crop up in all sorts of other lessons to say a few words in the right direction. Of course there would be special opportunities in the natural history course for teaching the scientific side.

5385. But at gatherings of mothers and gatherings of working men of full age, you think that instruction might be given fully by competent people?—I do.

5386. Do you think the magic lantern or kinema can be made use of to show examples of the fearful effects of these diseases?—I should not think it is very advisable. I think one wants to dwell more on the thought of health than on the thought of disease in these matters. One does not want solely to frighten them into better courses of conduct. They should be encouraged to think clearly and healthily about the subject rather than to think of disease.

5387. Of course, it is not only better courses of conduct; there may be so very much purely innocent infection, and probably is?—Yes.

5388. But you do not think it is advisable to give the grave warning which pictures of people suffering from these diseases would impress on the mind for life?—I should hardly like to express an opinion; I certainly think there are dangers. All medical people know the particular form of fear which is known as syphilophobia, and I think one should rather consider that possibility in any such course.

5389. Then I see you refer to vaccination. Do you think compulsory vaccination is desirable?—Yes, certainly.

5390. And if we had a vaccine which would render people immune from these diseases, do you think that might be made compulsory?—No, I do not think so. Of course, it is a hypothetical question.

5391. It is very hypothetical; we are never likely to get it?—Quite so. If I may return to the question of education for a moment, I would like to mention two other reasons why I think systematic teaching in elementary schools, is inadvisable. I have said the teachers are not prepared and the parents are not

prepared, but I should also like to say that I think the classes are much too large for such a purpose. If this teaching is given at all, it should be in comparatively small classes where the teacher can feel something like personal touch with the child, best of all is to give it to them individually.

5392. I am not quite clear whether you would give any instruction at all to children of elementary school age. It looks to me, from your statement, that you do not advocate that?—Not at present. Of course, where you get a well-qualified teacher who can give the physiology of reproduction as part of the whole physiology course, it might be done; but even there I think you want smaller classes than you do for many other subjects.

5393. But if the instruction was of the right kind as you contemplate, you would not see any objection to giving it to children in elementary schools?—Not the instruction on the physiological side. I certainly should not give any instruction about diseases in any case or at any time to children in elementary schools.

5394. Then, taking your very interesting evidence as a whole, I suppose your views may be summed up as the advocacy of the provision of ample and efficient free treatment by doctors in these cases?—Yes.

5395. And you attach great importance to a guarded educational propaganda?—Yes.

5396. (*Dr. Arthur Newsholme.*) You have taken a great deal of interest in this subject for many years?—For some years.

5397. And on several occasions I think you have seen the President of the Local Government Board in regard to it?—Yes.

5398. Before the appointment of the Royal Commission came forward?—Yes.

5399. As a result of those interviews, you presented one or two memoranda to the President of the Board dealing with the subject?—Yes.

5400. In one of those memoranda you strongly advocated, I believe, a previous investigation as to the amount of accommodation then available for the treatment of venereal diseases and its character?—I did.

5401. Such an investigation was in actual fact arranged for?—Yes.

5402. And before the investigation began, I believe you saw Dr. Johnstone who made the investigation, and conferred with him and myself?—Yes, that is so.

5403. That was early in 1912, I think; you will take it from me, perhaps?—Yes.

5404. At that interview, to which I think we devoted an evening, Sir Malcolm Morris was also present?—Yes.

5405. That was a date preceding the letters in the public press advocating the appointment of a Royal Commission on the subject?—Yes.

5406. You have seen and read Dr. Johnstone's Report, I think?—Yes.

5407. Would you mind saying whether you agree generally with his results or in what important points you differ from him?—I do not think there are any important points on which I would differ from him. Of course, one would like, to make, some additions.

5408. Quite so; it was necessarily a sampling report, and it was only intended as such?—Yes.

5409. In the preface to that Report some of the main conclusions of Dr. Johnstone were summarised. I would like to take you over a few sentences of that preface and ask you if you agree with a few of the statements therein made. "Syphilis illustrates more forcibly even than tuberculosis the importance of treatment as a means of preventing the spread of disease." That you would entirely agree with?—Yes.

5410. Then in another sentence further on: "It is evident from Dr. Johnstone's Report that the amount and character of the institutional treatment available in England and Wales for syphilis is unsatisfactory." You would agree with that?—Yes, certainly.

5411. Then it goes on to say: "There are very few hospitals specially devoted to venereal diseases, and it is doubtful if increase in their number would be the best line of administrative action." Have you any special views on that as to the provision of special

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hospitals or, as an alternative, the use of wards or beds in general hospitals?—I think that in the present state of public opinion, at any rate, the existence of special hospitals would have a considerable deterrent effect upon persons coming in.

5412. Then it is stated, further on in the same preface that "for the vast majority of patients suffering from syphilis in its active earlier stages there is everywhere a great dearth of the best means of accurate diagnosis." Do you accept that statement? May I put it in another way? If there is a dearth of good means of treatment, is there not also a dearth of means of diagnosis?—Yes, I suppose there is. Naturally, I have heard lately of the expansion of the facilities for the Wassermann diagnosis in a good many places.

5413. So even in the last few months that state of matters has very considerably improved?—Yes, I should imagine so.

5414. With regard to the provision of laboratory facilities?—I believe so.

5415. Then, further on, this point is raised: "It is probable that the subsidisation of accommodation in general hospitals, where modern means of treatment could be ensured, would be more successful than the erection of special hospitals." Would you agree with that?—Yes.

5416. And you agree also with the statement made here that each doctor should have access to efficient means of diagnosis of syphilis and gonorrhœa?—Certainly.

5417. Do you recommend that doctors should have to pay for that diagnosis or not?—No; I do not see why it should not be done, as the diagnosis of phthisis is done.

5418. As part of the State service?—Yes, like diphtheria also.

5419. And I gather you also agree with Dr. Johnstone's view that notification of venereal diseases is not at present to be recommended?—Yes.

5420. But supposing you had free means for diagnosis and treatment, necessarily the specimens sent up for diagnosis would have to be labelled. Would you recommend them being sent up with numbers, or with names attached?—I have not been able to see what would be lost if they were merely sent up with numbers. I do not see what drawback there would be to that.

5421. Do you not think it would be fair in return for the courteous service thus rendered, for the doctor subsequently to be required to send a statement as to his proved diagnosis and subsequent course of the case, or would you think that would tend to diminish the use of the means of diagnosis?—I think certainly it would be very fair to ask and encourage the doctors to do it. I should have thought that any attempt to make them do it would be impossible.

5422. You would ask them probably, but would not make it a duty. That is your view, I think?—Yes, encourage them to send it.

5423. Supposing you established these evening and day clinics for venereal patients either at general hospitals or elsewhere, you would have to keep a register of the cases, would you not?—Yes, I suppose so.

5424. I take it that register would really constitute a sort of indirect notification of the case, but, of course, would be regarded as strictly confidential?—Yes, it would; no doubt something is due for the sake of free treatment. Anyone who was suspicious of even that much possible publicity has the alternative of going to a private doctor and paying him.

5425. But instead of going to a private doctor it is possible he might for fear the register would not be confidential go to a herbalist?—Yes, if he had not sufficient ingenuity to give a false name at the dispensary.

5426. But some register would be necessary, would it not, to prevent patients flitting from hospital to hospital or dispensary to dispensary?—I do not quite see why. They ought to be made to understand that stand that it is very much to their own interest to be under continuous treatment.

5427. But supposing at the first hospital the patient had an injection of salvarsan, and for some reason took

antipathy to the doctor at the institution, and went to a second institution, it would be very bad for the patient if the second doctor wished to give him salvarsan at a time which would not fit in with the first administration?—Yes; but I cannot see how that could possibly be guarded against by any conceivable system in a big city.

5428. Have you thought at all of how these clinics should be financed?—I have not thought very much about it.

5429. From some public funds?—Yes, from some public funds.

5430. You know how they are financed so far as tuberculosis is concerned?—They might do so.

5431. Roughly, half from the central funds and half from local funds—leaving out the insured for the moment?—Yes.

5432. If a similar apportionment were made in regard to venereal diseases, the local authorities would wish to know, and probably require to know, whether they were paying for their own ratepayers or inhabitants, or whether they were paying for the inhabitants of other districts?—Yes.

5433. That would be the difficulty, and it would mean some system of book-keeping, would it not?—Yes.

5434. A good deal has been made of the fact that there has been delay in initiating the scientific treatment of venereal diseases. I take it many reasons have contributed to that effect, the moral reason among others; the view that these people must be punished for their sin?—Yes.

5435. That, I take it, has had a great influence in preventing efficient treatment?—I believe it has.

5436. The instance you gave of subscribers to hospitals shows that, does it not?—Yes, I think so.

5437. The hospital authorities, even when willing to treat these patients, are afraid to do so?—They say so.

5438. Lest they should lose their subscribers?—Yes, that is what is said.

5439. And one of the first points to be managed in getting these diseases under control is to show the wrong-headedness of that; that these people must be punished by letting these diseases be untreated, or badly treated?—Yes. My impression is that that view is very much less prevalent than it used to be and than it is now supposed to be. I think far more people have got beyond it than is commonly recognised.

5440. I suppose it is a somewhat similar feeling to the feeling which exercised people many years ago, that Queen Victoria at her first confinement had had chloroform administered to her. There was a religious outcry as to a sin against Genesis. Was that not so?—Yes, I believe so.

5441. Similarly, there is a feeling now against anything avoiding the punishment of people by disease for their sins?—Yes, I suppose that is the idea.

5442. But you are not in favour of the retention of any such notion?—Not at all.

5443. In fact one of your main points is that all distinction between these diseases and other diseases must be broken down as far as treatment is concerned?—Yes, I think it should be recognised that it is not necessarily a crime to have this disease, but that it is a crime to pass it on by carelessness.

5444. You made an important classification of communicable diseases and the methods of management of them. There were measures directed on behalf of diseased patients, and measures applicable to the whole community. In order to bring out for our benefit the meaning of this, I should like to take you over three diseases for two or three moments; I think it would be really worth while. We begin with typhoid fever. That is a notifiable disease?—Yes.

5445. When the case is notified, the medical officer of health or his assistant, visits the house, gives advice as to disinfection of the stools and urine, and warns the nurse about washing her hands. If he stopped at that point his duty would not be fulfilled, would it?—No.

5446. Supposing he had seven similar notifications on the same day and gave the same advice in each of the seven houses, would that fulfil the duty of the

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medical officer of health?—I think what you mean is, he would have power to trace out the source of the disease.

5447. Quite so. His greater duty, even than the personal precautions, is to trace out the source of infection, which might be water or milk or shellfish or something else?—Yes.

5448. Therefore your figures as to the greater decline of typhoid fever before there was any notification do not seem to me to be relevant unless you consider the means by which typhoid is spread. In former years you would agree, I think, that typhoid fever was spread chiefly by bad water supplies?—Yes.

5449. Also possibly milk?—Yes.

5450. The provision of a pure water supply has nothing to do with notification?—Quite so.

5451. The presence or absence of notification is not related to it?—No.

5452. But inasmuch as typhoid fever can spread from the patient to the nurse, if the nurse is careless, you would agree notification would enable the right advice to be given to the nurse or relative to safeguard against that danger?—Yes, certainly.

5453. Whatever the statistics may show, it is a matter of common sense that notification would enable good action to be taken which otherwise might not have been taken?—Yes, good action which otherwise might or might not have been taken.

5454. If there had been a good family doctor who knew his work, he might have given the same advice as the medical officer of health?—Just so.

5455. Now we will take tuberculosis. There you have similarly two classes of conditions causing disease: that is infection from person to person and the conditions which favour infection?—Yes.

5456. The mere giving of advice as to coughing and spitting would not cover the whole line of defence against that disease, would it?—No.

5457. It is important to look into conditions of housing and of work. For instance, in Sheffield, where you live, it is important to do away with the sharp angular metallic dust in the works, as well as to do away with spitting, is it not?—Yes, and to keep the workshops clean.

5458. So that in that disease also it is a question of environment as well as infection?—Yes.

5459. Now we come, last of all, to these diseases, syphilis and gonorrhœa. Has the environment anything whatever to do with the spread of these diseases, or is it merely a question of personal contact?—It depends on the definition of "environment."

5460. Yes, it does. I agree with you if environment in a crowded house means herding the sexes together and so on, that environment has a very important influence in the spread of syphilis and gonorrhœa?—Certainly.

5461. If it means dirtiness of living and so on, that also might have an important bearing?—Yes; but I think in this case we shall have to consider moral environment as well as physical. I do not say this Commission has to consider it, but it will have to be considered before these diseases can be got rid of.

5462. I think what I said really included moral environment, and it is a very important aspect of the matter. But still, syphilis is only spread by personal infection?—Yes.

5463. Direct or indirect?—Yes.

5464. And therefore, the whole gamut of precautions medically is included in the avoidance of infection?—Yes.

5465. And in that respect it does differ to some extent from tuberculosis, and still more typhoid fever, in which communal precautions have to be directly taken?—You mean the individual can protect himself in a way, but cannot in the other cases.

5466. That is so. You mentioned with regard to notification, the importance of giving help to the patients as an aid to notification, and I take it your main point is that unless you give that help you do not get to know the cases, and you get concealment of cases?—Yes. Unless you get some *quid pro quo* for notification.

5467. Quite so. At a previous meeting a witness suggested that while it was undesirable at present to have notification of syphilis or gonorrhœa itself, we might have notification of symptoms due to these diseases, for instance, snuffles or keratitis. We have already an example in ophthalmia neonatorum?—Yes.

5468. Do you see any serious objection to the notification of those forms of disease as a beginning?—I do not see any objection to the notification of ophthalmia neonatorum. I should want to think more about the others. You said snuffles?

5469. Yes, and interstitial keratitis. Would you gain much by having those notified, do you think?—I do not see that you would.

(*Dr. Arthur Newsholme.*) Imagine a case of interstitial keratitis, at what age does that usually begin? Dr. Mott would know. Is it two years?

(*Dr. Mott.*) No, later than that—seven or eight years old.

5470. (*Dr. Arthur Newsholme.*) Take a case like that which was acquired before birth; what action would you take?—I should take no action at all. The only thing you conceivably could do would be to enquire into the mother's health in view of future pregnancies.

5471. That would be some gain, would it not?—Yes.

5472. It might lead to the discovery of untreated disease?—Yes.

5473. And it might lead to the mother getting, even though late in the disease, salvarsan, or mercury, or something else which would prevent the birth of further diseased children. That might be good, but would it have disadvantages? How, for instance, could you persuade the mother to subject herself to that treatment without telling her the nature of the disease?—I think she would have to be told the nature of the disease. I really have not thought about this aspect of it very much.

5474. You mentioned evening clinics. I think you have recently visited them in France, have you not?—No, I have not visited them. I have a little information, and I hoped to have more to-day, but I have not got it.

5475. Are they subsidised by the State?—Yes, they are subsidised by the State, as I believe most of the hospitals there are.

5476. I believe that is so. Then with regard to the point about penalising persons who do not continue treatment, you would not agree with anything of that sort, would you?—No. It seems to be a relic of the old compulsory idea, and it is not giving a fair trial to the voluntary methods. I think what I would say is that what one wants to do is to give a thoroughly fair trial to purely voluntary methods, and to be guided by that trial in deciding whether any compulsion, and if so what, should be employed afterwards.

5477. Quite. Supposing a man with primary syphilis comes to me and is treated for three months, an insufficient length of time, we will say, and at the end of that period he announces that he is about to marry, and I tell him he must not marry for another year and a half, and he persists in his intention, what would you think ought to be done in such a case as that?—That is a problem to which I think no one has quite found a solution yet. Undoubtedly much more could be done by popular enlightenment. The bride's family in certain cases might ask for a certificate of health. There is no breach of professional confidence there, because if a man goes to a doctor and gets a certificate of health that he does not care to show to the family, it is his own business not to show it.

5478. But as far as that particular man is concerned, he has been enlightened by me as a doctor and I pressed him very hard. It is sheer wicked selfishness on his part; so that there is no chance with regard to his further enlightenment?—No.

5479. So that the only hope is in your suggestion that the parents of the girl will have sufficient strength of mind and courage to insist on a certificate. But in the absence of that, that poor girl must be victimised?—At present of course that is so. That raises the

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question as to whether the communication of disease should be made punishable. I have been trying to get some light on that. It is very much hedged in with difficulties, but it does seem to me that the English law is defective in that respect.

5480. Supposing there were a law making that a punishable offence—I suppose it is now?—No, it is not.

5481. Do you think you could often prove it?—No; I think that is one difficulty, or advantage, whichever way you take it. A law making the communication of disease punishable would very very seldom be put into operation. At the same time in such a case as you suppose—

5482. A fairly common type of case?—No doubt—in such a case there would be a certain threat. It would be possible to use the possibility as a threat to the man.

5483. That brings me to the last point I would like to mention to you. I imagined that I was the doctor in question. Should I be justified in threatening to tell the parents of the girl?—Of course professionally you would not be justified.

5484. Professionally you tell me I should not be justified. You are quite clear on that point?—I understand so from what I learned of professional ethics.

5485. (*Mrs. Burgwin.*) Do you not think if the average person got to know that snuffles and keratitis were really syphilis, there would be the same objection to having it known—to its being openly said it is syphilis?—Yes, I think it would.

5486. And that information and that treatment would soon get known, do you not think?—I do not know how soon it would get known; it would depend on how it was used, and how it was dealt with—what use was made of the notification.

5487. Do you know whether in Sheffield sex hygiene is taught in any of the elementary schools?—I do not.

5488. I presume the children in Sheffield leave school at 14 years of age?—Yes.

5489. And I gather that you do not think it would be wise to teach such children sex hygiene either as a class or as individuals?—Certainly not teach it to them in a class.

5490. How would you propose it could be given individually?—I think we should direct our efforts very largely to the parents, when we can get hold of them; then if the teachers were qualified to do it and give what is wanted something more might be done by co-operation of the parents and teachers.

5491. Even with children under 14 years of age?—It would rather depend on what one means. I think some ideals of family life and the responsibilities of motherhood and fatherhood can be taught before 14 quite safely and properly.

5492. You would not say that reproduction should be taught to these children?—Not in school. I think many wise parents do teach it very wisely before that age.

5493. (*Rev. Scott Lidgett.*) Before 14 years of age?—Yes, before 14—it should be done gradually.

5494. (*Mrs. Burgwin.*) You think the teaching of sex hygiene should not be disjointed from the general school course? I think that is what you said?—Yes, that was my doubt about having it given by medical men or women; that they would come in separately and make it something different from the other subjects.

5495. And you really would in botany lessons and lessons on biology bring in this sex hygiene?—You cannot teach botany at all without having something of the elements of sex taught.

5496. Yes, but I would keep it to vegetable matter, say. That is the difficulty I feel. I have heard young teachers teaching, and I have personally felt it was very bad teaching to associate in the little child's mind, I am speaking of children under 14?—I do not see that there will be any harm done with a wise teacher pointing out through a botany lesson, that a feeble plant is more liable to produce feeble offspring, and to do that in a way which will make many of the children apply it to the human race as well. It wants very great wisdom

and delicacy, I know, and as I think at present very few teachers are trained in a way which enables them to do it.

5497. You think, too, that the parents will have the right to take exception to such teaching being given to their children?—I think that it ought not to be given until the confidence of the parent has been to some extent secured. In some schools in America—what they do first is to invite the mothers to come and talk it over, then they begin giving the course to the girls, and invite the mothers to be present the whole time. That seems to me to be a most admirable arrangement; to teach it to the girls in the presence of the mothers. It helps to secure what you want most of all, to put the girls in the position to speak frankly to their mothers in private about the subject.

5498. And that is the way you would prepare the parent and the teacher. You said they need preparation. I think we are all agreed on that. Is that the way you would prepare the parent and the teacher for this instruction?—Of course that would not prepare the teacher.

5499. No; I want to know how you would prepare the teacher?—I think there should be some systematic instruction given in training colleges. No doubt that is a matter of very great difficulty, but I think it ought to be done, and I think it might be done on what I may call eugenic lines, using the word eugenic in its best sense. Then I understand that what is done, in London, and perhaps other places, is that teachers who are already teaching, are invited to attend courses where something of this sort is given to them, not at present with the object that they should give class lessons, but that they should be able to speak to their older girls privately when they see occasion to do so; that they should be qualified to have individual conversations with them. That seems to me an excellent sort of beginning, at any rate.

5500. (*Sir John Collie.*) Do I understand you to say that in typhus and typhoid there were more voluntary notifications before notifications were compulsory than afterwards?—No, I do not know to what extent they were voluntarily notifiable. It was the death rate that I was quoting; the death rate had been reduced very much before compulsory notification was introduced.

5501. You are aware, of course, that typhus was gradually dying out, and that the death rate would fall anyway?—I do not know whether typhus dies a natural death.

5502. It has died out practically?—Yes, by the improvement of social conditions; very largely by the removal of slums and rookeries.

5503. Then would not the fact that it was gradually dying out affect the number of notifications?—Of course it would. My point was that typhus was being reduced by some causes, which I did not attempt then to specify, before notification happened, and that therefore the notification of typhus has had very little effect on its diminution. There was comparatively little typhus left for it to have any effect upon.

(*Sir John Collie.*) Quite. That is my point.

5504. (*Rev. J. Scott Lidgett.*) A good deal of your evidence this afternoon has been critical. I want, for my own sake, and possibly for the sake of the Commission, to get some clearer notion of your positive programme. You have stated some very weighty objections against notification. Would you have the community take any steps to ascertain the prevalence of these diseases, and to control the conditions of them, and if so, what?—By providing treatment in some such way as I have suggested, you will get a much better knowledge of the prevalence of diseases than by any means that we have at present. To the extent that you provide free treatment and means of diagnosis, you will get there a mass of statistics which, if they are not complete, will at any rate be of far more value than anything we have now.

5505. Then would you leave the community entirely dependent upon voluntary resort to public institutions for all its knowledge of the prevalence of

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these diseases?—I think so, if I understand the question.

5506. I say, would you leave the community entirely dependent upon voluntary action of a patient in order to secure a knowledge of the prevalence of these diseases?—The only alternative would be some form of compulsory notification. I do not see that there is any other alternative.

5507. (*Chairman.*) I think you contemplated, supposing the voluntary method failed, you would have no objection then to resorting to compulsion?—I think it is very difficult to say what is required until the voluntary method has been given a fair chance, and when we have done that, we shall have more facts to go on as to where compulsion, if any, is necessary, and of what sort.

5508. (*Rev. J. Scott Lidgett.*) I suppose the chief danger to the community comes from the most unscrupulous and undisciplined of the patients?—Yes, from the most ignorant, the most unscrupulous and the most undisciplined.

5509. Do you not think that many of those would be the very last to resort to methodical treatment?—Some of them will. There will be a certain number undoubtedly. But I cannot help thinking that there will be fewer than are expected.

5510. I am simply putting it for the purpose of elucidation. Are there not such grave risks to the innocent in the undiscipline of these worst cases that perhaps the lesser evil would be some form of notification?—I do not think so, because I think it is precisely the undisciplined that it will be most difficult to notify or to deal with when you have notified them. Notification would help with just a very few of those, but I think the harm it would do would be much greater at present and for a long time to come.

5511. You mean the harm in deterring people from revealing it to anyone?—Yes, in driving the whole thing underground.

5512. Then may I ask, would you give us an outline in a few sentences of the whole of your programme so far as public action is concerned, and apart from education, for dealing with these diseases. How would you go to work?—I think one would have to go to work as is done with other diseases. You say apart from education?

5513. I am going to ask you some question on that?—And also apart from what has been said about free and accessible treatment.

5514. Yes, to follow it up?—You want free and accessible treatment. You want much more knowledge by the public of the dangers of the diseases, and of the value of early treatment. Then you would have to deal with what we already know, incomplete though it may be, of the conditions of life in which these diseases flourish, and deal with those conditions perhaps in direct or indirect ways. If I may illustrate by an example from other diseases; the water supply has already been referred to. One great cause of the improvement in the water supply was the discovery that a bad water supply was a cause of cholera and of enteric. Nobody thinks about cholera now, when they are providing good water. What we want is in some way to provide a pure supply of the necessities of life, and those necessities include not only material things, but recreation, literature and all that feeds the mental and moral life of the people. Then further, one would have to take account of what one can only call perhaps the interested motive for encouraging the conditions of life in which these diseases flourish. Something would have to be done against commercialised vice in some form or other, and something to discourage, the immense amount of what may be called sexual promiscuity in some classes of the population. It is a very large programme, and would need study from many different sides. But I think it is as clear as anything can be, and it was brought out very much at the International Congress of Medicine, that the question is not merely a medical one, but that you have to deal with it from the educational, the social, and the ethical sides, as well as from the administrative side.

5515. I understood you to say that no inquiry should be made in the case of a particular patient as to how the disease was acquired?—I do not think I said that. I said their admission to hospital should not be conditioned by inquiries as to how it was acquired.

5516. You reserve your opinion about special wards in the hospital; but if there were special wards for these diseases would that not act as a great deterrent? Would the people come in if they were in danger of being put into a ward that was known as allotted to these diseases?—It might deter, to some extent. Hospital doctors would have to devise means for getting over that. Very often these wards would be in a block, part of which was allotted to wards of a different kind might be given to this subject. Then if a patient goes to Block A it may be for this purpose; but then, another part of Block A is given, perhaps, to skin diseases which are of a different nature. Therefore there would be no necessary stigma about Block A. I think the difficulty could be met, though it would from that point of view be better if they could be in the general wards; but that is a question of hospital administration, and some will do it in one way and some in another.

5517. Am I to understand that you lay great stress upon the importance of physiological instruction in moral education?—No. I think too much stress has often been laid upon it. Some of the best kind of moral education has been given over and over again by parents and teachers who knew nothing about botany or embryology. Character is more important. The thing one wants to avoid on the physiological side is the refusal to treat this subject. There is no need to teach physiology in order to give moral education but, if you do give a course of physiology, and completely leave out the reproductive organs, you are giving the wrong kind of education, for you tacitly imply that there is something shameful or evil about those organs.

5518. I suppose you are aware that a good deal is being done by enlightened and experienced teachers to give moral instruction and guidance to their pupils before they leave the elementary schools?—I know that in some places it is being done.

5519. And especially where the moral dangers that beset children are most acute?—Yes.

5520. On the education side, would you recommend resort to the evening institutes and factories as places where instruction should be given?—I should think it would be very valuable.

5521. Do you think there is any good prospect of our being able almost entirely to stamp out these diseases by diffusing knowledge of their dangers and providing for free treatment?—Not entirely. As I have said, you must study the conditions of life, because even supposing for the sake of argument that you could get hold of every case to-day and deal effectively with every one there would still be the danger of introducing the disease from without and of their spreading as before if the right soil for them to spread in is left there undisturbed.

5522. And you think that so long as there is what you call commercialised vice, there will be what we may call a nidus of these diseases left?—Yes, a most important nidus.

5523. Have you any suggestions for lessening that danger?—Of course the campaign has begun to some extent. The law as it exists in England needs to be carried out more thoroughly.

5524. What law?—The laws which aim at punishing third parties who make a profit out of immorality. I think one very important point in connection with the matter is the better protection of the young of both sexes from those who try to make a profit out of their corruption, and also the protection of children who are in moral danger owing to the neglect or the mere ignorance of their guardians.

5525. That is to say, the strengthening and extension of what we call White Slave Legislation. Is that what you mean?—Yes, and the Criminal Law Amendment generally.

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5526. (*Canon Horsley.*) I think you said that notification was useless unless followed up?—Yes.

5527. That is a truism, is it not?—I suppose so.

5528. As a matter of fact, is not notification generally followed up?—Yes, notification of the ordinary communicable diseases is. Confidential notification could not be followed up; that is what I mean.

5529. As a matter of fact, notification at the present moment is chiefly valuable because of the visit of the medical officer of health and health visitors and so forth, who give oral instructions and leave literature?—That is one very important way in which it is useful. That is the main way.

5530. From the point of view of the health committee and so on, that is the chief way. To know how many cases there are of a disease is not so important as to get to each case and leave behind instruction?—Yes; but it is also of value in tracing out the sources. I mean if you find a tremendous lot of enteric in one district it is of value for finding out what is wrong with the water supply or the milk supply.

5531. Of the dietary?—Yes.

5532. But if we do not go there, we cannot do that?—No.

5533. Then the more notification, the better from the point of view of prevention of disease?—Yes if wisely and effectively followed.

5534. I had a case, for example, in my own parish of a boy who died from typhoid after a hearty meal of hokey-pokey and cockles. Obviously, the notification of that case was useful in teaching people not to take such a variegated diet?—Yes, but you can do a great deal without notification. Take, for instance, alcoholism.

5535. But in that particular case I have mentioned we should not have gone to the house unless it had been notified?—No.

5536. Take another case. Supposing you notify and you find that the case notified is of a young man of 18 with syphilis, we will say. Your visit to the house brings out the fact that he is sleeping with his younger brother of 14, which is a very common case. There surely notification would have a very beneficial effect. It would probably save that boy of 14 from being contaminated?—Yes.

5537. It is not an uncommon case at all?—It is very common. I quite agree with you. One will admit that the cases that are visited might in a great many instances be benefitted by notification. I quite admit that.

5538. Then with regard to penalising the communication of disease, which I suppose most people desire if possible, is it possible at all to prove it? In most cases it would be one person's word against another's, would it not?—Yes, in most cases it would.

5539. In 8 cases out of 10 of affiliation it is impossible to prove; it is simply the girl's word and the man's word, and you cannot have corroborative evidence?—Yes.

5540. Whether it is as guardian or parish priest, I have very nearly given up affiliation cases that I would like to take up for the financial benefit of the mother, because it is difficult to prove. It seems to me a case of contamination would still be more difficult to prove?—Yes. The subject it was introduced to-day in connection with a case of contamination in marriage. There, there would not be the same difficulty of proof.

5541. In the case of the doctor's premarital certificate, doctors' certificates are not always of the same value, are they?—No.

5542. In that case, supposing a man in society is going to marry an American heiress and he goes to a doctor and says, "I must make this marriage and you must give me a certificate," do not you think he will be able to get the certificate even if he were suffering in some way, because if one doctor would not give it he could go to another?—Yes; it would depend what sort of certificate the bride's family were satisfied with.

5543. In friendly societies, for example, you find certificates are not always quite accurate?—No. I do not attach very great importance to that suggestion.

5544. Then in the case of the premarital certificate, people generally talk as if it were only to be required of the man. I suppose it will be on both sides?—Certainly.

5545. Then as regards that extremely important point which the Chairman has already alluded to, that is the Derbyshire case; of course, in elementary schools there would be tremendous difficulty in giving instruction, would there not?—Yes.

5546. Does not one difficulty arise from the fact that it would be just as reasonable to take weight as age as a criterion of when you might give instruction? Some children are extremely innocent and difficult to teach at the age of 15, but others are extremely precocious at the age of 12?—Certainly.

5547. Even if it is thought you could give instruction at the elementary school age of 14?—Yes.

5548. Last month a girl, aged 13, at an elementary school at Maidstone was confined of her first child. In that case age was not very much to go by. Then, on the other hand, you know how in all classes there is tremendous prejudice of the ignorant and in some cases, perhaps, even of the guilty to such instruction being given?—Yes.

5549. I conceive a mother or a father who is conscious of past guilt are the very last people who desire their children to be taught about it?—Yes.

5550. On the other hand, there is that tremendous ignorance in all classes?—Yes.

5551. A case occurs to me of a lady who would not allow her daughters, who were all marriageable, to come to some classes on botany that I got up, because they would learn about fertilisation. That exists very largely, does it not?—Yes.

5552. We hope it will diminish?—Perhaps it may be appropriate to say here, that in past years I have done a good deal in the way of addressing mothers' meetings on this subject, and I have found among the women of the mothers' meetings usually a very great willingness to hear and great gratitude for being told something about it. Even in the cases which are so common in Sheffield of women who have had forced marriages, they get up and say, "I only wish I had known some of this when I was a girl. I should not have got married in such a hurry," and so on. They express very great gratitude to us for speaking to them, and very great anxiety to instruct their daughters in the right way after hearing us. I always endeavoured to put the ethical and social aspects in the forefront, because that gives the right setting for the physical facts.

5553. When you talked about the elementary schools and the possibility of instruction there, had you in mind this fact; that a school for boys and a school for girls is rather an English peculiarity, and that there are already a good and increasing number of mixed schools in England?—Yes.

5554. That rather increases the difficulties?—They have separate classes for some things in the mixed schools. The girls have sewing alone, while the boys do something else.

5555. There is not very much?—I may remind you that I did not approve at present of giving systematic sex instruction in elementary schools.

5556. There is another point that has not been brought out at present. You know there is a very large amount of very careful and useful literature that can be given to parents?—Yes.

5557. The White Cross Society, for example, has any amount?—Yes.

5558. Then there is a lady in Liverpool, a clergyman's wife, who has written three most excellent books?—Yes, Mrs. Hill.

5559. Yes. So, at any rate, the giving of these books is very good indeed, and a great deal more might be done by literature in the case of people who are not available or desirous of taking instruction?—Yes. You want to be very careful about the literature, but I think books such as those you have mentioned are excellent.

5560. (*Dr. Mott.*) You said that notification has been in vogue in Denmark for 50 years?—Yes.

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5561. Has it been of no use at all?—I cannot see that the notification of venereal diseases has been of any possible use except for statistical purposes.

5562. Then why has it not been given up?—Because the statistical results are considered valuable. Perhaps I may show you that they have also exactly similar notification of delirium tremens and other diseases.

5563. I think you said it could lead to no useful information?—I think it could lead to no useful action.

5564. But it was long, long ago that Esmarc and Jessen found that general paralysis of the insane was due to syphilis, because they observed that the people who suffered from syphilis and had been notified many many years before came into the asylum suffering from this disease; therefore, they stated that syphilis was the cause of general paralysis?—Was that in Denmark?

5565. No, in Norway and Sweden—the Scandinavian countries?—But was it notification?

5566. Yes?—I do not know about Norway and Sweden.

5567. All Scandinavian countries have had notification, have they not?—But the system is a little different; it is not exactly the same in them all. I understood that in Sweden, special work was done at a time when syphilis was epidemic, quite apart from sexual communication,—when it was enormously prevalent, and they may have had special rules in the districts where that was so; but I believe it is correct that in Denmark they have never had notification by name of venereal diseases.

5568. No. Then you said that the death rate from diphtheria, per million, I think, has not decreased since notification. Is that correct?—It has decreased of late years, but the decrease did not begin till many years after notification; the statistics do not suggest any connection.

5569. Since notification, we have had the antitoxin treatment?—Yes.

5570. Do you mean to affirm that the antitoxin treatment has done nothing for diphtheria?—I do not wish to say that. What I did say was, that the death rate in 1861 to 1865 was 247; from 1871 to 1875 it was going down. Then from 1881 to 1885 it began to go up. Then from 1891 to 1895—that was mostly before antitoxin, was it not?

5571. Yes?—It continued to go up, and then after that it began to go down again. What I mean is that the antitoxin may have caused it to diminish, but there is no evidence that notification caused it to diminish.

5572. But do not you think a great deal has been due to the fact of diagnosis? Now every case of diphtheria is notified by bacterial examination of the throat, and that has played a most important part?—That has played a very important part.

5573. And it has done a great deal in diminishing the number of cases of diphtheria?—The bacteriological examination and the notification are not necessarily and inseparably connected.

5574. Supposing we take the children's hospitals. Some of the children's hospitals have been obliged to close sometimes on account of diphtheria. They examine the throat and they know there is a case there, and they take great precautions. In Canada, I understand they give every child antitoxin every six weeks in order to prevent it?—But has that anything to do with notification?

5575. I am only showing you that you cannot altogether rely upon statistics?—No.

5576. You have quoted statistics in favour of a certain theory of yours against notification. I want to show you that your statistics with regard to the Registrar General's returns can be explained in another way?—The whole point of what I said about diphtheria referred to notification. The introduction of antitoxin is a different matter. Notification without antitoxin certainly did nothing; or I will not say did nothing, but it showed no beneficial effect on the death rate.

5577. But surely if you have a case of diphtheria and you can discover it by bacteriological examination

and you notify how that case got about, you go to the house to see whether there are any more cases and prevent the people in the house getting it; because it is a question of infection. In many ways it is very like syphilis, because you can get it simply from the exudation from the throat or from using a spoon. It is very much the same as syphilis produced by utensils?—Yes, that is perfectly true; but I think my whole point was that a very great reduction has been produced in many of these other diseases without notification and that notification does not necessarily bring about a reduction in disease. I think that is clear. I also gave the illustration of measles.

5578. I would rather dispute that. I have always advocated the notification of measles. I think it is a much more serious disease than people think. There are many really serious sequelæ that follow measles. The public look upon it as a mild thing and think the whole of the children can take measles and not suffer from it, but they do?—That is so; but that is not quite the point.

5579. I will give you an example. A daughter of mine was studying at the Academy of Music and she took measles there. She brought it home. If that had been notified a whole number of people would not have been infected. They infected the scholars at the institution, and it was a very serious matter for me. I nearly lost my second child through that being brought home. Then with regard to the case Dr. Newsholme put to you of congenital syphilis which was discovered by keratitis rather late in life, at eight years of age, we will say, supposing that child is one of a family and there are younger children who may develop keratitis and blindness later on, the same as the first child did, do not you think it is the right thing for the doctor to go to the mother of the family and enquire about the health of all the rest of the children, and, if possible, get a Wassermann reaction done, so that the children may be treated before they suffer with this disease?—I think it would be very desirable.

5580. And the mother be treated, too?—Yes.

5581. How would you propose that this should be done, because it is clearly a moral duty on the part of the medical man?—Would it not be possible if we have the organisation of treatment of syphilis which has been referred to, that there should be nurses or health visitors or assistants of some sort connected with that who could go to the house and enquire?

5582. Do you think then it would remain a secret?—I think it could very well be done if the syphilis dispensary were part of the health organisation; you could have a visitor from the health office who was not necessarily attached to that department to go and make inquiries. Moreover, if it is a child of that age, somebody brings the child to the doctor and you can begin your work by persuasion there.

5583. But with such special treatment as would now be adopted in the treatment of syphilis by intravenous or intramuscular injection of salvarsan, do not you think it will generally be known how the person was treated if we educate the public?—Yes.

5584. Then would you make it voluntary on the part of the mother, whether she had this treatment or not, for herself and her children?—Yes, I would.

5585. On the part of the children?—On the part of the mother; and in regard to the children, I think so. I am sure you would have to do it by persuasion at first. I am quite sure that the experience with tuberculosis and other diseases shows that you must accustom the public to the idea of doing it voluntarily, or else you will array a tremendous amount of opposition against yourself.

5586. I agree with you?—My own belief is that if it is given a really fair, good, intelligent trial by entirely voluntary means, the residuum of cases who may seem to need some form of compulsion will be comparatively small, and some means can then be found for dealing with them.

5587. Then supposing the mother enquires of the doctor, "What is the nature of my disease?" would you tell her?—I think in that case she ought to be told.

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5588. The doctor should tell her?—I think so.

5589. I think so, too. It is for her to find out how she got it?—Yes.

5590. Then with regard to the establishment of night hospital treatment, I quite agree with you it is very desirable indeed. Many of these poor people are unable to come in the afternoon and wait an hour before they are treated. They would lose their employment. In a short time specialised clinics would grow up in our large cities, would they not?—Yes.

5591. Do you think that would be an advantage?—I think there would have to be certain specialised clinics for the teaching of medical students.

5592. I am not speaking of the teaching of medical students. I am speaking of the treatment of the patients. I admit it is very valuable for the teaching of the students, but take it for the treatment of patients?—I see no reason why there should not be these specialised clinics.

5593. Of course, there would be great advantages, would there not?—Yes.

5594. Because the treatment would be more efficient and the diagnosis would be much more efficient if you had specialists like we know they have in the Army, the Lock Hospital and so on, where they treat a large number of cases. But would not those clinics be liable to be labelled venereal clinics?—Yes.

5595. Then which alternative will you have; less qualified persons, or specialists to treat these cases?—I certainly would not stop anyone treating them when he had become a specialist.

5596. I am not asking you that. I am asking you which you prefer?—They ought to have the best treatment available.

5597. Certainly. I quite agree with you. Then the nature of the disease would become widely known, would it not, if they attended that particular clinic?—In some cases it might.

5598. And they might just as well be notified then, might they not?—No, I do not think so. I think there is a very important difference here. It is quite true that a great many of the people who are suffering from syphilis are very anxious for privacy, but a great many others are not; and what I object to is compelling those who wish to keep it private to have any sort of publicity about it—to have them notified. There are many people who would not mind being notified, and who do not mind how public it is. I will not say a great many, but there are a considerable number; and I think you would find that it is in the early stages that people are most anxious to conceal it, not when they have got used to the idea. When you take a case such as you mention where a whole family is syphilitic, I think usually the neighbours begin to have a suspicion, and the woman herself has a suspicion, and there is no further reason to conceal it.

5599. I can show you some cases where the doctor has not a suspicion?—When he is better educated, he will have.

5600. He would know if there was keratitis, but there are other cases where he does not?—With regard to what you say about a specialised clinic, it is true it might amount to being practically equivalent to voluntary notification, but it would not be the same thing as compulsory notification, because there is no publicity for any one who really cares about avoiding it.

5601. Do not you think each patient who attends voluntarily should have a card given to him, and on that card could be given indications of the result of the Wassermann reaction, and the result of the examination of the exudation from the primary sore, the treatment of salvarsan, and the dose in terms that a patient would not understand; so that if he went elsewhere and took this card with him the doctor treating him would know whether he had had this given to him. Of course, it would be a serious matter if you went giving large doses of salvarsan from one person to another not knowing?—Yes, I think the card would be decidedly advantageous. I cannot see any objection to it. Of course you could not make the patient show it if he did not wish to.

5602. But if he is a patient on the panel, we will say—and there are a great many on the panel, no doubt—the doctors would not treat them with salvarsan, but they would send them to these special institutions or departments where salvarsan was given and where the diagnosis was made?—Yes.

5603. And they would come back with that. They have to go to another panel doctor if they move. Should not they take on the card?—Yes. It sounds to me as if it would be a very good plan.

5604. You think that would be a sound principle to adopt?—I think so.

5605. I mean it could be done in a way that they would not know and only the doctor would know?—Yes.

5606. Then with regard to the case that Dr. News-holme put to you in reference to the marriage of a man who is suffering with an infection but who marries three months afterwards in spite of the warning contained on the card, because the card would certainly give him printed warning that he should not marry for a certain time or he would infect his wife, do not you think he should be penalised in some way if he did? Do not you think that is a crime?—I think it certainly is a crime. I think there should be some sort of penalty for that.

5607. You know in Prussia an annulment of the contract of marriage in a case of that sort can be obtained—not divorce but annulment?—That seems to me very proper.

5608. It does seem very proper, does it not?—Yes.

5609. Of course there is a great deal of difficulty with gonorrhœa, is there not, because it is very difficult to decide when a person with gonorrhœa is cured?—Yes.

5610. But there is no difficulty with regard to syphilis. The time and the modern methods of examination of the blood will enable a doctor to say whether a man is safe to marry or not, and that would be put on the card, and if the man did not adhere to the directions he ought to be penalised in some way. You would agree with that?—Yes. I am not quite clear yet as to what form the penalisation should take, but I think there ought to be some possibility of it. I understand that a decision in the contrary sense was given in English law in a classical case, and it was distinctly stated that it was not in any way an offence for a man to infect his wife. That is contrary to some earlier decisions.

5611. But you do not agree with that judgment?—I think it certainly needs amendment.

5612. (*Dr. Scharlieb.*) Do not you think that the fundamental trouble of all this is the ignorance under which the whole population lies?—Yes, I think the ignorance is one of the fundamental things.

5613. And that ignorance has been supported, as you have pointed out to us in your paper, by the idea in the public mind that one of these diseases is trivial and may be neglected?—Yes.

5614. Secondly, that these diseases are shameful and must not be confessed to?—Yes.

5615. Thirdly, perhaps partly as the result of the fault of the doctor, and perhaps partly owing to this attitude of mind of the public, the public does not trust its medical advisers in these matters as it does in most others?—Yes, I think that is so.

5616. Of course there are other elements undoubtedly, but must we not deal with this? Do not you think there is a dense atmosphere of ignorance which we must attack, and attack from every possible side?—Yes.

5617. Do you see any signs of a thinning of this? Do not you think it is one of the wonderful signs of the times that we four women should be sitting here with our men colleagues discussing this? Is not that a healthy sign?—I think it is; and I think that that same atmosphere of more open and frank discussion of the whole question is perceptible everywhere.

5618. I do not know whether it has happened to you as it has to me, to have women coming during the last few months wishing to be instructed in these matters and wishing to discuss them, and showing a wonderful desire to get the rights of the question and

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to understand and be able to act?—That is so. There is that among women in general, among the teachers and very much among nurses.

5619. But also among women of society?—Yes. They are refusing to be kept in ignorance now.

5620. Have you had people coming and saying to you that they think this Royal Commission is one of the best things that has happened to the Nation for a long time?—I know they are saying so, some have said it to me.

5621. It has happened to me. A very large percentage of my women patients in the morning say to me, "we are so thankful for this. We believe this is going to be the beginning of better things." The public are ignorant; but may I not also take it for granted that doctors and nurses to a certain extent are also; the doctors to some extent, and the nurses very largely are entirely ignorant of these diseases except as far as their names are concerned. They have no working knowledge. They do not know how to protect themselves, and they do not know how to advise their patients?—I believe that is so. I believe that until the last three or four years, many of the hospital nurses were never given a single word of instruction about these diseases, or even the precautions to be taken in nursing them, but I am sure also that doctors have not been as medical students sufficiently instructed.

5622. When I was a medical student I know I was badly taught. Were you badly taught?—I certainly was very insufficiently taught on these subjects.

5623. And therefore you had very little opportunity of defending yourself or of diffusing useful knowledge?—Yes; I felt that I really learned more from my patients in some of these cases than they learned from me.

5624. Of course, the instruction of doctors and nurses is comparatively easy. That has to be insisted on by public opinion and by the General Medical Council. That will be all right. But do you not also think the hospital and poor law authorities want education as much as anybody else?—I think they want it very much indeed. You mean the governing boards of hospitals?

5625. Yes?—Both those and the Boards of Guardians are exceedingly in need of education in many instances.

5626. Do you chance to know that quite recently, within the last few weeks, the governing board of a certain hospital in London has refused to allow cases of syphilis as such to be treated as out-patients or in-patients?—No, I have not heard that.

5627. Do you not think it is an extraordinary anachronism that such a thing should be possible?—Yes, I believe a great many hospitals have that as an old rule and have let it slide.

5628. (Mr. Lane.) Not out-patients, surely?—I think it is a rule though it is never observed in a great many of them.

5629. (Mrs. Scharlieb.) Of course, naturally we must suppose so far as the hospitals are concerned that the Boards of Directors and Committees are influenced by the fear of losing public subscriptions?—Yes.

5630. Then is it not necessary they should be taught that they would rather gain?—If it can be done.

5631. Quite so. Then with regard to the patients: you have said in your statement that the ordinary patient did not trust the medical adviser in the same way that the men in the army and navy are evidently trusting their medical advisers?—Yes.

5632. Has it occurred to you that the medical advisers in the Army and Navy have, of late years, been perfectly frank with their patients: that they have given them cards stating what the trouble was and have told them how to avoid infecting other people, and there are directions on those cards for their own guidance. Is not the time coming when the private medical adviser should tell the truth and give this plain, straightforward advice?—Yes I think so. I think there needs to be very much more openness. In the Army and Navy there have been lectures given to all the men, as well as advice to those actually diseased.

5633. That brings me to another point about the instruction of the public. Do you not think that medical men and medical women should give lectures or conferences at which questions and answers were asked and given to audiences. For instance, a girl in a hair-dresser's shop said to me the other day: "Why cannot you lady doctors lecture to us girls?" "Hundreds of us get caught every year. Why cannot we be warned? We do not know what we are doing." Men to men and women to women, do you think that sort of instruction would be very useful?—I think it would be very advisable.

5634. And you would give instruction by lecture, leaflet, book, and by private talk?—Yes; but I think you want always if possible to give a background of the physiological and health teaching and not to make it all on disease.

5635. Quite so: "Thou shalt," not "Thou shalt not"?—Yes.

5636. Then if it is to be physiology and hygiene, why should not we teach the physiology of reproduction? Surely, it is quite a part of our nature, just the same as digestion, respiration, and the circulation. Why should those subjects be entirely cut out?—I think they should be taught. The great mischief of the past has been not so much necessarily that things were not taught, but that there was an obvious blank left in the minds of people.

5637. Which ought to be treated quite simply and naturally; that is is a God-given function to be guarded and used aright?—Yes.

5638. Then with regard to the character of the treatment to be given, I think I understand you feel strongly that the treatment must be equal for rich and for poor and for men and for women?—Yes.

5639. All absolutely equal?—Yes.

5640. Then also that the treatment must be available for everyone, and free to the poor?—Yes.

5641. And that it must be convenient?—Yes.

5642. And that it must be without stigma?—Yes.

5643. (Mrs. Creighton.) By the remark that you make here about the admission for treatment not being conditioned by inquiries as to the manner in which the disease was contracted, do you imply that in certain hospitals a prostitute, if known to be such, would be refused treatment?—Certainly, in many hospitals that is so.

5644. Is it exceptionally difficult for prostitutes to obtain treatment by a competent medical officer?—I do not know. I believe it was stated here that there were many fewer went to the Lock Hospital than used to do and, I do not know why it is, that fewer are under treatment there. In most places it is very difficult for them to get any institutional treatment, except in workhouse wards; and sometimes the treatment there is most unsatisfactory.

5645. Should you imagine that women go very largely to quacks?—I do not know; I have not been able to ascertain that; but I should not think so largely as men, because women do not so often know what is the matter with them. They do not so often suspect the nature of their ailment.

5646. Of course a prostitute would suspect, would she not?—Yes.

5647. And you have no means of knowing whether she would go largely to quacks?—I know some of them do in certain instances. Perhaps I may say here, one reason that frightens them from hospitals is that among the poorest kind of prostitutes there is still a traditional fear that if they go into hospital they will be smothered. Only a short time ago I heard it from two or three quarters. The belief is that when a woman is thoroughly rotten, she goes into a lock ward, and they smother her. So, naturally, they do not wish to go in until they are really tired of life.

5648. Then, as regards medical education, I was talking about certain statements that have been made before this Commission to some young women doctors, and they told me that they had had quite adequate instruction, and that they had been taught everything they could expect. Should you think that means a

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[Continued.]

great improvement in teaching of late years?—I think it depends very much on the particular lecturers that they have to do with. In certain hospitals and medical schools there has been perhaps one lecturer who has felt it a duty to give this instruction, and has given it, not in a systematic course, but when opportunity has offered. I know there have been some of those connected with the women's medical schools lately who have felt that responsibility, and therefore a great many of them get it. It depends which teacher they are under.

5649. Would your idea be that women students were probably better taught on these matters than men students, because they showed more desire to learn?—I really have no knowledge to enable me to answer that question.

5650. Then as regards the teaching of young children, you said you felt the most important thing was that the teacher should be instructed in these matters. That seems to me to be absolutely true, because I do not think when we have been talking about what young children under 14 years of age ought to know, there has been sufficiently before the minds of the Commission the state of depravity that there is in so many of our schools. You would agree that the teacher should know enough to notice this and to teach such individuals, however young they may be, what they ought to know?—Yes, I think so.

5651. Therefore the most important thing is for the teacher to have her eyes opened?—Yes; I think that is very decidedly the important thing. Individual teachers are beginning to deal with individual children at any age that is required, and they might do a great deal more if they were helped.

5652. Have you any means of knowing how far this teaching is being given in training colleges now?—No, I have not. I have heard of some where it is being given, and of others where it is not; and that is all I can say.

5653. I know that a year or two ago when I spoke on the subject I found great unwillingness on the part of the authorities of some training colleges to accept the idea at all. Would you think that that still prevailed in certain regions?—I imagine so. The training college which I am thinking of, where it is done systematically, is only by the visiting lady doctor talking individually to the girls.

5654. So it is her individual doing. It is not arranged by the authorities that they should have the teaching?—I believe so.

5655. Then as regards the case about the man who insisted upon marrying in spite of the warning of the doctor; would you think that it would be right that in such a case a doctor should be at liberty to warn the girl or her parents of the condition of the man?—That would be breaking through the whole tradition of medical ethics, and it is a very serious business to break into that code of medical tradition, even in such a hard case as this.

5656. Even if it were made legally incumbent upon the man to do so?—Upon whom?

5657. On the doctor to give such a warning when he saw the danger?—Some doctors might do it. But if there is any compulsion or command, it all leads to concealment. I mean the patient would then try not to let the doctor know he was going to be married.

5658. (Mr. Lane.) You are familiar with the effect of notification in Denmark?—Yes.

5659. What is your opinion as to its success?—I think that notification has never been supposed to be of any use at all in Denmark except for the purpose of compiling statistics; and it was of use to them in this way, that when they abolished their old system of regulation of prostitution, they had some statistics to go on and to compare with what has happened since. They have statistics to judge of the effect of measures on the population as a whole; but I am not aware that it has ever been suggested that it has any other use.

5660. Do you think that the compulsory treatment part has been a success there?—I do not know that there is enough evidence to say yes or no. I have some statistics about the large number of patients—perhaps not a large proportional number, but still

some hundreds or thousands—who disappear every year and cease treatment. Of course a certain number are traced and dealt with, but there is a considerable number who are not traced nor dealt with. As to how far that vitiates any benefit, it is difficult to say.

5661. You know the name of Dr. Pontoppidan?—Yes.

5662. Do you know his opinion upon the effect of these Acts?—I heard him speak of it at the International Medical Congress, and I believe his opinion then was—of course you must remember he was contrasting the present condition with the old method of regulation of prostitution which we have not got here and have not discussed—that the present system had done no harm. My impression is he was a little doubtful as to whether it had done much good, but at any rate he thought there was no harm done by it in any way.

5663. I have a quotation here in which he said: "A rigid enforcement of the system would only frighten the patient away from medical treatment, and thereby counteract its own end." Is it your opinion that compulsory notification would lead to concealment of disease?—I think it would. I do not know that it would lead to more concealment than there is now, but then it is mostly concealed now.

5664. You do not think compulsory notification would have much effect on concealment?—What we want to do is to get all cases properly treated, and I think compulsory notification would lead to a great many cases being concealed and held back from proper treatment.

5665. That would drive them into the hands of quacks and herbalists?—Yes, and very largely not even known or professional quacks or herbalists, but those whom you may call amateur quacks.

5666. Then you would penalise those unqualified persons who treated syphilis?—I do not see how you can. You have to allow them to make the diagnosis if you are going to penalise them for treating a specified disease. How you can specially exempt one class of diseases from treatment by quacks I am afraid I fail to see.

5667. I believe under the Insurance Act unqualified practitioners are shortly going to be recognised?—I do not know.

5668. Then another point about the notification. A large number of the subjects of syphilis are also the subjects of syphilophobia?—Yes.

5669. And such patients will go to, perhaps, a dozen doctors in the course of a month?—Yes.

5670. That would lead to some difficulty in notification, would it not, which would render it very fallacious?—Yes, I think so; I think that would be a very great difficulty, and I do not see how that could possibly be checked if we have anything that we can call confidential notification.

5671. So that the statistics would be of very little value?—I think of very little value.

5672. I see that you object strongly to the name "Lock Hospital." Do you think that would have a very deterrent effect on patients?—All such names have a deterrent effect, and not only in this country. In Paris there is a large hospital which is named officially the "Hôpital Ricord," "Ricord" having been a distinguished syphilologist. The doctor in charge, Dr. Queyrat, has said that he believes the name does act as a deterrent and is a distinct drawback for patients. He is trying to get his hospital called something else. He calls it the "Hôpital Cochin Annexe," and he is very anxious to get rid of the "Ricord" in some way. The word "Lock" has a specially unpleasant signification because it is supposed to have something to do with locking up.

5673. Do you think the alteration in the name of the hospital will lead to an increased rush of patients there?—I have been told by someone connected with the hospital that since a different name has been printed on the notice board, writing paper, &c.—is it Harrow Road Hospital?

5674. That is the female hospital; Westbourne Road?—I have been told that patients do seem a good

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[Continued.]

deal more willing to come in now, and there has been a perceptible effect from that change.

5675. Alluding to the male hospital, do you think that is so?—I cannot say.

5676. Because at present the work is so great that we are hardly able to get through it. We think if the name were altered we might have to increase the staff?—It was chiefly on the men's side that Dr. Queyrat spoke. His was originally a male hospital only and it was male patients who objected to the name "Ricord." I do not suppose that the name troubles out-patients so much as in-patients.

5677. They do not seem to object, at least it does not keep them from coming to the Lock Hospital in very large numbers. With regard to this tradition you mentioned about being smothered, do you think that exists in general hospitals if a patient goes to a general hospital for treatment?—No, because she never does go to a general hospital when she is as bad as that. I do not know how far it exists; but a rescue worker asked me about it a couple of years ago, because she had been told that morning by a girl whom she had asked about another: "Oh, she has gone into the hospital. You see, she was very bad. She was almost rotten, so she has gone in to be smothered." The girl said it quite naturally and simply.

5678. I know the tradition exists at the Harrow Road Hospital?—This was a workhouse infirmary.

5679. In fact, there is the ghost of one of these ladies who has been smothered that is said to walk about the passages. You see no objection to the notification of snuffles and keratitis?—I am not prepared to express an opinion on that. I have not thought sufficiently about it.

5680. Would you notify anyone you saw with a sunken bridge of the nose?—I hardly think so.

5681. You would know that that person had congenital syphilis?—It would appear to me there are very great objections to, and not very much advantage in, the notification, and that where it is desirable to follow the case up, it could be done without notification as successfully as with it.

5682. Then as regards treatment in general hospitals, you are not in favour of having special wards. You would mix these patients with the others? That is a matter of hospital administration on which I do not wish to express an opinion.

5683. It is very possible some surgeons would object?—Yes; but with regard to all other diseases there is a great difference in practice between different hospitals. For instance, as to whether enteric should be nursed in the general wards or not, and this is almost a similar question.

5684. (Mrs. Creighton.) Might I ask another question? Syphilophobia has been several times mentioned. May I, as an outsider, ask exactly what you mean?—I think if I may, I will refer you to Mr. Lane.

(Mr. Lane.) Syphilophobia simply means the fear of the disease, and in the case of a hypochondriac who may have had syphilis at one time, he would imagine he still had it, and put down any imaginary symptoms he had to this disease.

(Mrs. Creighton.) Is it the case that they can produce the symptoms of the disease by their nervous fear?

(Mr. Lane.) No, they cannot.

5685. (Chairman.) You realise, do you not, that if this great increase in institutional treatment is carried out, the secrecy part, which you say is so much desired, disappears more and more?—Yes.

5686. There could be nothing absolutely confidential in the case of people going into these institutions?—That is so.

5687. You are hoping that this cause which you now say operates in a way to make notification undesirable, would pass away and, therefore, it may not be so serious as you think?—No; I think the difficulty is if you take an individual who has syphilis,

whether it is a man or a woman, the longer they go on with it and know they have it, the less anxious they are to conceal it in a sense. It is when they are half afraid whether it is that or not—when they are doubtful whether it is that and when they are hoping that nobody else will find out and hoping that it may quickly disappear—that is the time when they are most anxious for secrecy, and that is the time when it is most necessary for us to get hold of them. I think the extreme desire for secrecy may ultimately pass away, but it will have to pass away gradually, and especially in regard to these early stages you must hold open to everybody the possibility of this secrecy. For instance, I think you would find a great many people if they suspected it was syphilis would go to a doctor whom they could trust to keep it secret, to get the diagnosis. Then they would very likely remain under that treatment as long as they could afford it. When they could no longer afford it, then they would be much more ready to go to an institution than they ever would have been at first while they were still doubtful whether it was syphilis or not. I think it is exceedingly important to give the possibility of secrecy to those who really care about it.

5688. My point is that that is exactly what we cannot promise them?—Yes, you always can.

5689. There are means by which the disease might become known, therefore we cannot hold out any promise of this kind in the kind of institution we wish to start?—In institutions you cannot; but my point is this: that if it is to be treated like notifiable diseases, then you cannot offer privacy even while they are under their own private doctor. I maintain you must keep the possibility of private treatment for those who will pay for it. I think perhaps I might illustrate it in this way. In a town I know of, when tuberculosis was made notifiable, one of the very first cases to be notified was the Mayor of the town, who had a very chronic form of phthisis. If it had been a form of syphilis, could you imagine that the mayor would have allowed himself to be notified to his own medical officer of health?

5690. Then I should say the mayor would never have gone into one of these institutions, and therefore I should say you would not get that mayor to be treated in this way?—Then if I may say so, you are arguing the case of notification from institutions.

(Chairman.) No; my point is simply whether we are not making rather too much of a bogey of this strong demand for secrecy, and my view is that unless that demand for secrecy can be broken down, your voluntary system cannot work well. That is what is in my mind.

5691. (Mrs. Creighton.) Does not Dr. Wilson maintain that the secrecy will be possible still for those who can pay for it?

(Witness.) Yes.

(Chairman.) I should say that it is impossible if they have to go for institutional treatment.

(Mrs. Creighton.) Yes, but if they can pay for it, they would not go in for institutional treatment; they would have private treatment.

(Witness.) That is what I mean. At present if the mayor of a town, or anyone else, in the most exalted position, gets scarlet fever or small pox, there is no difficulty about that; institution or no institution, he is notified. That is what I think it would be impossible to enforce in regard to these diseases.

5692. (Chairman.) You are thinking rather of the classes that can pay for the best treatment than of the large class that cannot?—Yes, in regard to notification. But I think some of the large class who cannot pay for it would take a good deal of trouble to pay for secrecy during part of their illness, at any rate.

5693. To that extent it would defeat the object of our free institutions?—It would depend on how they are worked. In Italy they do not even ask the patient's name.

(Chairman.) Thank you very much.

The witness withdrew.

SIXTEENTH DAY.

Friday, 6th February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES,
K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALTER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANR, F.R.C.S.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Surgeon G. B. SCOTT, R.N., called and examined.

5694. (Chairman.) You are in charge of the Naval Hospital at Chatham?—I was,

5695. Were you there long?—2 years and 3 months.

5696. What are you doing now?—At present I am appointed to the barracks at Devonport.

5697. To the Naval Hospital there?—No, to the Naval Barracks.

5698. You are no longer doing duty, then, in connection with hospital work?—No, not now.

5699. You have given us a number of very valuable figures in various tables, but they will have to be printed as an appendix to our Report. I am afraid they cannot go direct on to the minutes of evidence, so I will just run through their general features in taking your evidence. These cases of treatment by salvarsan and neo-salvarsan were all under you during the time you were at the hospital at Chatham?—No, some of them were at Plymouth as well, and in Haslar Hospital. They are the figures practically for the whole navy.

5700. In the big hospitals of the navy?—Yes.

5701. You treated more, I think with salvarsan than with neo-salvarsan?—Neo-salvarsan has not been in use so long as salvarsan.

5702. It came in at a later period. The total number of cases treated is 4,203, and in regard to those you gave as many as 9,912 injections. Taking the difference between the two treatments, I see you gave a larger dose of neo-salvarsan: 0.9 gramme as the maximum for one injection of neo-salvarsan, and 0.6 gramme for salvarsan. I suppose you found that to be desirable, in your experience?—I think the more you can give, the better the result.

5703. That seems to indicate that neo-salvarsan is less powerful in its action than salvarsan?—I do not think there is anything to show that it is less powerful as regards effective treatment than salvarsan. It is supposed to be less toxic, and therefore you can give a larger dose than of salvarsan.

5704. As regards the interval between injections, I see you give six days as the smallest interval for neo-salvarsan, and seven days for salvarsan?—Yes.

5705. That has been arrived at as the result of medical experience?—Yes, I think so, from experience at the various hospitals.

5706. It is better to have a smaller interval for the neo-salvarsan than for the salvarsan?—Yes.

5707. That looks as if salvarsan was not so strong as neo-salvarsan?—No. The idea is that it is more poisonous, and therefore that you should give a longer interval between the injections. It is less easily excreted.

5708. You have given us a very useful table of 1,169 cases of Wassermann reactions treated by salvarsan and neo-salvarsan, and you have given a summary of them. The main point of the summary is that, after two injections, in 119 cases of primary syphilis, you got 26.8 per cent. positive and 73.2 per cent. negative reactions. After three injections in 40 cases, the figures change to 17.5 per cent. positive and 82.5

per cent. negative. Does that mean that the number of positive cases diminished quite rapidly after three injections?—Yes.

5709. Then, taking secondary syphilis, after one injection, of 35 cases you got 60 per cent. positive and 40 per cent. negative; after two injections, in 623 cases, there were 40.6 per cent. positive and 59.4 per cent. negative; and out of 132 cases you got 37.1 per cent. positive and 62.9 per cent. negative after three injections. Those are injections of both salvarsan and neo-salvarsan. I take it?—Yes, they are combined together.

5710. Therefore the number of positive results declines pretty rapidly from the one injection period to the third injection period?—Yes.

5711. In regard to tertiary syphilis, you give in nine cases after one injection 55.5 per cent. positive and 44.5 per cent. negative; after two injections, in 155 cases, 65 per cent. positive and 35 per cent. negative; and after three injections, in 48 cases, 64.6 per cent. positive, and 35.4 negative. Now what do you argue from that?—In the first place, that the results you get from primary syphilis are a great deal better than the results you get in later syphilis; and, secondly, the more injections you give the better are the results as judged by the Wassermann reactions afterwards.

5712. The difference in the value of the treatment comes out strongly if you take it at the early stage?—Yes, undoubtedly.

5713. Then you have taken the effect of salvarsan and neo-salvarsan treatment over certain definite periods of syphilis. That gives you certain results which you have tabulated in an interesting and important table. Taking the summary of results, I see that in regard to primary syphilis with negative Wassermann reaction, after two injections, in 15 cases, you got 6.6 per cent. positive and 93.4 negative. After three injections, in 10 cases, there is no percentage of positive, but 100 per cent. negative?—Yes, there were no positive. It should be 100 per cent. negative only.

5714. I see. What do you deduce from that?—The idea of the table was to bring out the value of early treatment of syphilis. The difference between this table and the other lies chiefly in the terminology of "secondary syphilis" which is an extremely vague term, and one that it is really rather a pity to use in statistics. These are my own series in which I have made tests, as regards a definite period of years, of primary syphilis with negative reactions, primary syphilis with positive reactions, secondary syphilis treated during the first year of the disease, and syphilis treated after the first year of the disease. As a rule, all the statistics which are found under that are lumped together under secondary syphilis, which is a very vague term. Secondary syphilis may last over a period of five years, and tertiary syphilis may last a very long time.

5715. Are these results directly comparable with the others?—They are from the effect of treatment,

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except that great distinction should be made between primary syphilis treated with a negative Wassermann and primary syphilis treated with a positive Wassermann, because the results obtained are decidedly different.

5716. In regard to the cases of primary syphilis with negative Wassermann, were those original cases, or cases that had been under treatment in some other way before?—No, no treatment at all; they were fresh cases.

5717. They were cases which came in and were diagnosed as syphilis?—Yes, by finding the spirochete.

5718. By finding the spirochete. Those were tested and gave a negative result?—Yes, they gave negative results at the time of injection.

5719. And those negative results increased, after three injections, to the whole number?—Yes.

5720. Those cases of primary syphilis with a positive Wassermann reaction are cases which you tested directly they came in, and they gave positive results, I suppose?—Yes.

5721. Those gave, in six cases, after one injection 100 per cent. positive, meaning that one injection made no difference?—Yes, no difference at all.

5722. After two injections, of 74 cases you got 31 per cent. positive, and 69 per cent. negative. That is a very large drop?—Yes.

5723. Finally, after three injections, of 23 cases there were 21·7 per cent. positive, and 78·3 negative?—Yes.

5724. Then, going on to the secondary stage treated during the first year of the disease, after one injection, in 32 cases, you got 62·5 per cent. positive, and 37·5 negative; after two injections (159 cases), there were 45·3 per cent. positive and 54·7 per cent. negative; and after three injections, in regard to 66 cases, 16·6 per cent. were positive and 83·4 per cent. negative reactions. That means, I suppose, there was a steady and rapid drop as the injections increased in number?—Yes.

5725. It is fairly uniform. Then, taking syphilis treated after the first year of the disease, what stages of the disease would these cases include?—Any case which is over a year from the date of infection.

5726. You did not classify them as primary or secondary. It is merely a record of date?—Yes, merely a record of date.

5727. In that case it was general syphilis treated after the first year of the disease; and after one injection of 8 cases, you got 62·5 per cent. positive and 37·5 per cent. negative reactions; after two injections (138 cases) there were 66·6 per cent. positive and 33·4 negative; and after three injections, 44 cases, you got 63·7 positive and 36·3 negative results. So that that does not produce anything like the same result?—No.

5728. Nothing like so favourable?—No, not as early treatment.

5729. In fact, after two injections, you got a greater number of positive results than after one injection?—Yes, that is so.

5730. And even after three injections the positive percentage is higher than it was after one injection?—Yes, it is.

5731. How do you explain that?—When syphilis has lasted as long as a year, one, two, or three injections of salvarsan produce but little change in the Wassermann reaction. If you went on to five or six injections you might get better results, but you would have to extend the treatment a very long time before getting any real improvement.

5732. In all these cases, therefore, a very considerably prolonged period of treatment would have to be gone through?—Undoubtedly, if the disease has lasted for as long as a year.

5733. The moral of that is that late treatment is not nearly so effective as early treatment?—Yes.

5734. Next you give us a table of cases which gave negative Wassermann reactions after treatment by salvarsan or neo-salvarsan, but afterwards became positive between 4 and 20 months after treatment. Taking the total of that table, out of the number of

negative cases which subsequently became positive, the percentage of Wassermann relapses is 11·1. Can you give any explanation of that phenomenon?—I think it is a low estimate of the amount that would relapse. At any rate, in regard to those last three sections—primary with positive reaction, secondary treated during the first year, and treated after the first year of the disease—a larger number than 11·1 really do relapse, I think.

5735. Do you think those figures understate it?—Undoubtedly.

5736. I see the larger number of relapses treated after the first year of the disease is after two injections. That gives 18 per cent?—Yes.

5737. That is the biggest, I think?—Yes.

5738. Then in regard to clinical relapses; out of a total number of 4,203 cases treated, you got only 3·2 per cent. of clinical relapses?—Yes.

5739. Does that mean relapses not counterchecked by the Wassermann test?—All these cases gave positive Wassermann reactions, and in all active syphilitic lesions were present.

5740. You then give some figures as to the results obtained by a second course of salvarsan. Do you call three injections a first course, or more injections?—As a rule, now, three injections are always given; but when salvarsan first started two were considered a first course. Now we consider three injections a first course.

5741. There were 67 cases you examined which got their second course of two or more injections of salvarsan or neo-salvarsan, and 47 were positive and 20 negative three or more months after treatment. The percentages are, positive 70·2 and negative 29·8. That still leaves a high positive percentage?—Yes.

5742. Which, I suppose, you would expect?—Yes, one would expect that.

5743. Then, turning to reinfections after treatment by salvarsan, there are five case of reinfection which occurred after treatment for primary syphilis by two injections of salvarsan and mercury. Does that mean cases of men who reinfected themselves after they had had treatment but were not cured?—No. I considered that they were cured. They gave negative Wassermann reactions and, so far as one could tell, they were cured.

5744. You regarded them as cured?—Yes.

5745. And then they went and infected themselves again?—Yes.

5746. That shows apparently, that they were not very much deterred by their previous unpleasant experience, and were ready to run the risk again?—Yes, those five.

5747. Among all these cases here you know of only five in which reinfection occurred?—Yes. There were only five which you could definitely say were reinfections, although other cases occurred where doubt might have arisen.

5748. (Canon Horsley.) Five out of how many?—There were eight other cases which might have been classed as reinfections.

5749. You mean five out of thirteen, then?—Yes.

5750. (Chairman.) I suppose these cases are not common?—No, not common.

5751. So far as diagnosis is concerned, would it be easily recognised that they were reinfections and not recrudescences of the disease?—I took as a criterion of reinfection the fact that they had a negative Wassermann between catching the disease a second time and the first treatment, and also the fact that the primary lesion occurred on a different place. Where the primary lesion occurs on the original site it is often merely a relapse, but in these cases the lesions did not occur on the original site.

5752. Broadly speaking, it would be easy to distinguish those cases. You would not be likely to miss them?—Yes.

5753. In your mortality returns of all cases treated,—that is, 4,203, with 9,912 injections—you give two deaths as being due to neo-salvarsan, and one as happening after the second injection of salvarsan?—Yes.

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5754. You say that the last case was complicated by diphtheria?—Yes.

5755. Which probably may have been the cause of death?—Yes.

5756. So far as those figures go, you had no deaths absolutely solely attributable to salvarsan, but two to neo-salvarsan?—Yes.

5757. In regard to epileptiform convulsions, your experience is so small that these figures are perhaps not of much account. There were three cases only in which convulsions followed the injections?—Yes.

5758. One started, as I see here, 58 hours after the second injection. In both those cases there was recovery, I take it?—Yes, in both.

5759. Then, as to the cases of nerve affections originating after injection, several of them occurred after one injection, and you put them down to insufficient treatment?—Yes.

5760. And of late, I suppose, owing to sufficient treatment there have been no cases?—No. I do not think those cases would have occurred if a second injection had been given.

5761. Did you see those cases yourself?—I saw most of them myself. One was a case of facial paralysis.

5762. Next there are two comparative tables intended to show the difference between treatment by mercury injections and mercury given by the mouth only. In the first table, out of 504 cases treated by mercury injections only, there were 75 per cent. positive and 25 per cent. negative reactions?—Yes.

5763. So that that could not be regarded as a very successful treatment?—No.

5764. Turning to the cases treated with mercury by the mouth only, of which there were 537, they gave a percentage of 71.5 per cent. positive, and 28.5 negative. So that, judging from those figures, the mercury taken by the mouth was rather better, but practically there is not much difference?—I do not think there is enough difference to attract attention.

5765. Some of these latter cases seem to have been treated for as long as four years?—Yes.

5766. But still, the general result of treatment by mercury, as shown by these tables, is unsatisfactory and not at all hopeful?—That is so.

5767. And compared with mercury, there can be no doubt whatever that salvarsan is greatly superior?—Yes, it is greatly superior.

5768. You have given us a comparison dealing with relapses under the different treatments. You give, under the first head, salvarsan or neo-salvarsan treatment with mercury; and you have ascertained that only 3.2 of the cases have relapsed—those are clinical relapses. I think you said that might be an underestimate. You also say that 10 per cent. would be the maximum figure for relapses?—Yes, I think so.

5769. Those are clinical relapses with salvarsan or neo-salvarsan and mercury—combined treatment?—During the first two years. I have only had them under observation about 2½ years.

5770. Turning to treatment with mercury alone, you say that in your opinion there are about 50 per cent. of relapses. Have you any figures to support that opinion?—No. I was not able to get any figures to support that.

5771. But you are convinced that the total number of relapses has been very much greater where mercury only has been used?—Yes, very much greater.

5772. Then your calculation is that, as compared with the year 1909, when there was no salvarsan treatment, it may be said that no less than 8,647 days' sickness have been saved by the use of salvarsan in the year 1912?—Yes.

5773. That is a great saving, is it not?—Yes. But that figure is not as large as the saving really is.

5774. What is the flaw in that statement?—The flaw is that many cases were sent to hospital with no active signs of disease at all, for treatment, whereas under the original mercury treatment alone, those cases would not have been put on the sick list at all; they would have been on the continuous list.

5775. Still, there is no doubt the gain is bigger?—The gain is very much bigger than the 8,000.

5776. At Chatham Hospital the average number of days sick for syphilitic cases was only 22 during 1912; that is the average number of days' detention?—Yes, detention in hospital.

5777. Did you detain the men who were under salvarsan treatment in bed as long as that?—No, not the whole of that time.

5778. They were under treatment?—Yes, simply under treatment.

5779. Turning to the improvement shown in the number of cases invalided, in 1909, before the introduction of the salvarsan treatment, 0.94 per thousand of the strength were invalided for syphilis or other venereal diseases, I suppose. In 1912 the ratio per thousand of strength had fallen to 0.69. That shows a marked improvement, does it not?—Yes, but the figures are in relation to syphilis only.

5780. Turning to the comparative values of salvarsan and neo-salvarsan, in your salvarsan cases you got 49.4 per cent. positive, and 50.6 per cent. negative, Wassermann reactions. In your neo-salvarsan cases—which were very much smaller in number, I notice?—Yes.

5781. You got 48.8 per cent. positive and 51.2 per cent. negative. There is no real difference there?—No, you could not go on that.

5782. You say as against neo-salvarsan, that it is much less stable than salvarsan, and therefore must be used with more care?—Yes.

5783. And you have come to the conclusion that it is not so desirable; it does not show any better results in treatment, and it is less stable?—Yes.

5784. On the whole therefore you favour salvarsan?—Where the time is a consideration and many injections have to be given, neo-salvarsan is preferable.

5785. But as regards curative effect you have no reason to suppose that it is superior?—No; I see no evidence to support that.

5786. Now we come to mental disease, which is a very important branch of this subject. You have not, of course, a very large number of mental diseases due to syphilis to deal with in the navy. The total number of cases in the medical wards tested by Wassermann reaction is given as only 108. Is that in one year?—No; in two years, at Chatham Hospital only.

5787. The total number of cases in two years. Of those you got 47.4 per cent. positive and 52.6 negative reactions. 47.4 is a fairly high proportion, is it not?—Yes.

5788. May it be deduced from that that something (not much) under 50 per cent. of these mental cases are due to syphilitic infection?—Yes.

5789. Were these tests made before or after treatment?—They were made immediately each case came into hospital.

5790. Then the cases did not come to you as syphilitic cases but as mental cases?—All cases coming into the mental wards of the hospitals are sent up, as a matter of routine, to have their Wassermann test done, whether there is a history of syphilis or not.

5791. Any mental case that arose in the navy now would be sent to hospital and tested by the Wassermann test at once?—Yes.

5792. You give a history of the positive cases, and of those only one had salvarsan treatment?—Yes.

5793. You cannot say what would have been the effect on those mental cases of the salvarsan treatment, had it been given?—No.

5794. Then you deal with the absolute and relative reduction in the incidence of syphilis and mental disease in the ten years, 1902 to 1911. Taking mental disease, during the first five years, 1902-6, there was an average case ratio per year per 1,000 of 1.078 and in the period, 1907 to 1911 of 0.582. The corresponding cases of primary and secondary syphilis being 53.23 in the first period of years, and 36.62 in the second. Do you wish by that table to bring out that, as primary and secondary syphilis has decreased in the navy, mental disease has fallen correspondingly?—Yes.

5795. You want to bring out the obvious connection between mental disease and syphilis in the navy?—Yes.

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5796. Then you deal with the incidence of extra-genital chancres. You had to deal with 1,100 cases of syphilis at Chatham, of which 8 had extra-genital chancres. Are those considered to be syphilitic or not?—Yes, undoubtedly.

5797. You distribute those eight cases according to the site of the chancre, and I suppose you found evidence of syphilis in each of them?—Yes.

5798. But those were contracted in what we call an innocent way?—Yes.

5799. So that out of those 1,100 cases there were eight which were clearly contracted by accident—cases of innocent infection?—Yes.

5800. I think they are not very common. Then you give us some information about the incidence of "chancreoid." Is that the same as soft chancre, or not?—Yes, that is the term used in the "Statistical Report of the Health of the Navy" for soft chancre.

5801. Is soft chancre now supposed to be syphilitic or not?—The majority of soft chancres are supposed to be syphilitic; but some occur which are not, I think.

5802. You say that between August 1911 and September 1913, 302 cases were admitted to Chatham Hospital and diagnosed as "chancreoid," or "venereal sore of doubtful nature." Were they diagnosed by the Wassermann test?—They were diagnosed either by finding the spirochæte or by the Wassermann, or by the development of secondary syphilis.

5803. Of those cases 255 later proved to be syphilitic?—Yes.

5804. Showing that those sores were originally syphilitic in their origin?—Yes.

5805. We have had some evidence before us that soft chancre is not syphilis, but is a distinct disease of a venereal type. This information of yours shows that a great deal of it must be regarded as syphilitic?—Yes.

5806. Can it be said that your diagnosis and treatment have been closely standardised as regards these diseases?—Yes, as regards the navy undoubtedly.

5807. And that the same diagnosis and treatment is carried out at all your hospitals?—Yes, both at home and abroad. There are a few differences in the method of doing the Wassermann reaction, but beyond that they are practically all the same; it is practically only a technical difference.

5808. So that all your cases are directly comparable?—Yes.

5809. Do you use the early form of Wassermann, or later modifications of it?—I use the original form with a modification of certain parts of it, in the antigen. I am using cholesterin antigen, but practically it is the original form.

5810. Can all your large naval hospitals, both at home and abroad, now carry out the Wassermann test?—Yes.

5811. Can they all make the microscopic test also?—Yes, all of them.

5812. Do all these cases go as soon as possible, wherever they are, into one or other of your large hospitals?—Yes.

5813. On board ship I understand you cannot diagnose the disease?—Yes; most large ships have microscopes. Of course, they cannot do the Wassermann on board, but they can do the microscopical part easily.

5814. Can all the surgeons now on board your large ships carry out the microscopical tests?—Yes, undoubtedly.

5815. What special training do your young officers get in these diseases when they first join the navy?—They go first of all to Haslar Hospital, and do three months there under present conditions.

5816. On these diseases only?—Yes, they are in the venereal wards there to learn. At Greenwich, before they go to Haslar, they are taught all the microscopical appearances and the method of using the microscope for this work, and also the method of doing the Wassermann reaction.

5817. With the special training they now get do you find them perfectly able to do all that is required?—Yes, quite.

(Sir David Brynmor Jones.) I have no questions.

(Sir Kenelm Digby.) I have no questions.

5818. (Sir Almeric FitzRoy.) I should like to ask you with reference to what you said just now about salvarsan, what happened to patients before it was established, at what intervals it should be given—what time should elapse between?—Between the intervals?

5819. Yes, between the intervals which you have now established should elapse before injections of salvarsan or neo-salvarsan are repeated?—The original interval was really about 6 or 7 days. Now we give an interval of a month between the injections.

5820. You have only arrived at that experimentally, suppose?—Yes.

5821. What happened in the course of the experiments until you established what was a safe interval; did many of the patients suffer?—Very few suffered. The deaths which occurred followed the second injection given 7 to 10 days after the first. Alarming symptoms commenced 48 hours after the second injection. It was thought that it was due to the rapid repetition of the second dose that those mortal cases occurred. I do not think, myself, the second injection should be given so soon, except in cases of primary syphilis with a negative Wassermann reaction.

5822. Have you reason to think that the cases you have studied are representative, on the whole, of an obstinate type of the disease?—No.

5823. It would appear from what you state, that they were less docile to treatment than those that have fallen within the experience of some of the other witnesses we have had here?—No, I think they were taken from syphilis of every class and description, because they dated from cases which had only just appeared, to cases in which the disease had been present probably for 20 years.

5824. There was nothing special about them?—No.

5825. Is not reinfection the only absolute proof of cure?—I do not think so.

5826. You would not go so far as to say that?—No.

5827. It has been stated in this room that is so. One more question in reference to this interesting table you have given us, which is headed: "Evidence to show that mental disease is largely caused by 'syphilis.' May not the cause of lunacy and syphilitic infection be concurrent in many cases?—You mean that the lunatic had contracted syphilis owing to his lunacy?

5828. That lunacy developed itself quite apart from syphilitic infection. It does not do to assume that because 47 per cent. of the mental cases were syphilitic, that syphilis was the cause of lunacy in all these cases, surely?—Of these cases I have given here, 35 of the positive gave no date of infection. They also gave no history of treatment. The rest of the positive cases were all old cases; at any rate, it was a matter of several years.

5829. In your statement, on the top of page 6, it appears to be argued that because 47 per cent. of these mental cases show proof of positive reaction, the lunacy must necessarily have been due to a syphilitic source. But the syphilitic poison and the tendency to lunacy may have been concurrent; not the one caused by the other?—There were no fresh cases of syphilis, nor any syphilis within several years. Directly they show the least signs of mental disease they are sent to hospital. These are all cases which showed signs of mental disease.

5830. (Chairman.) None of those cases had shown syphilis before?—Yes, in some of them there was a syphilitic history.

5831. And in others nothing but mental defect had shown itself?—That is so.

5832. (Sir Almeric FitzRoy.) Is it right to assume that in all these cases lunacy was due to syphilis?—I think that the coincidence of such a large proportion of positive reactions is extremely suggestive of syphilis being the cause of insanity, but of course it is not proof that this was the cause of any one case.

(Dr. Mott.) In the London County Asylums we have 31 per cent. which give a positive Wassermann

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reaction, that is, of the male admissions, and the majority of those are general paralytics. They would all be syphilitic. But there are 14 per cent. which occur in people suffering from epilepsy and other forms of insanity, and it is quite possible, as you say, to have a syphilitic Wassermann reaction coincident with that form of insanity.

5833. (*Mr. Lane.*) Do these figures of cases treated, 4,203, represent all the cases of syphilis on home stations?—Yes.

5834. You mention Plymouth, Haslar and Portland?—The figure includes those places. Portland has a small hospital with only 100 cases.

5835. Are there any other places where syphilis has been systematically treated on modern lines?—Yes; at Gibraltar, Hong Kong and Malta.

5836. Any other places in England, I mean?—At Haulbowline in Ireland; not in England.

5837. You started by mentioning the dose here. I think you will agree that .6 gramme of salvarsan is equivalent as regards arsenic to .9 gramme of neo-salvarsan?—That is so.

5838. In taking your Wassermann reactions and mentioning positive or negative, how long an interval does that represent after the cessation of treatment?—All the reactions done are at least three months; they run to periods of two years.

5839. At least three months?—Yes, at least three months.

5840. You spoke of one, two, and three injections. I suppose you would not limit the number of injections to three?—No.

5841. Have you had any cases in which you have gone on to the extent of some observers like Macdonagh, to seven, eight, or nine injections?—Six injections have been given fairly frequently.

5842. Six is your maximum?—Yes.

5843. The Wassermann reaction you do is Fleming's modification, is it not?—No. At Plymouth they have done Fleming's modification, and part of these results are from Plymouth. But at Chatham I used the original Wassermann, using cholesterin antigen.

5844. I understood you had written to the effect that you did your Wassermann by Fleming's reaction, but I must have been mistaken. You would agree that the cases you have to treat are of a very favourable class?—They are favourable in so far that one can follow them up, and make sure that all of them get treatment.

5845. And their condition of health must be good?—Yes.

5846. And they have good food and good quarters?—Yes.

5847. So that your results would be more favourable than those in a civil hospital?—I think they would be.

5848. You have mentioned five cases of reinfection. Is there positive evidence that those were not recurrences of chancre, *chancre redux*, as it is called?—The evidence against chancre redux is that there was a negative Wassermann in the between period, and that the chancre did not come back in the same place. A definite history of fresh infection was given by the patients themselves.

5849. It is absolutely positive that they were not on the same site as the original sore?—Yes, quite.

5850. Then you mention deaths from treatment. You say that two deaths have occurred from neo-salvarsan, and the doubtful one from the old salvarsan. You would not infer from that that the neo-salvarsan was more dangerous than salvarsan?—I do not think there is enough evidence for such inference.

5851. Have you come across any cases of idiosyncrasy against the treatment? Have patients ever had very serious symptoms following immediately or shortly after injection?—I have come across no cases, except those mentioned here, of convulsions following it; and those may be said to have been due to idiosyncrasy.

5852. No alarming cases following immediately after?—No.

5853. Those, I think, were affections of the optic nerve or the auditory nerve?—In one case of the optic

nerve and in another also a case of the auditory nerve; there was facial paralysis.

5854. Did you attribute that to salvarsan?—No, I think it was due to insufficient treatment.

5855. And was probably a manifestation of syphilis?—Yes.

5856. Have you come across any cases of nerve affection following salvarsan, such as optic atrophy or affection of the auditory nerve?—Those cases I gave followed salvarsan, but were due, probably, to syphilis. I have seen several cases which were due to syphilis and had never had salvarsan treatment.

5857. You are familiar with the fact that a considerable number of cases of blindness have followed arsenical treatment in other forms?—Yes, in other forms.

5858. But none from salvarsan that you are aware of?—None that I am aware of.

5859. In regard to your treatment by mercury following salvarsan, what was the nature of the treatment, was it by injection?—In some cases by injection; some were given mercury by the mouth—mercury and chalk powder.

5860. Did you treat by inunction?—Many had inunctions, but not for long periods.

5861. What was the nature of the injection—of soluble or insoluble salts?—The soluble salts used to be used some years ago. We use now the metallic mercury with lanoline. I have given the method on the last page of my printed statement.

5862. That is the insoluble mercurial cream?—Yes, the mercurial cream.

5863. From your figures it would appear that mercury given by the mouth is more efficient than that given by injection?—I think the difference between the two is really not sufficient to draw any conclusions from. Although they show a slight difference I do not see anything to show that mercurial injection is a better form of treatment than mercury given by the mouth—provided it is taken by the mouth, of course.

5864. You will agree, I suppose, that you can get a patient under the influence of mercury much more quickly by injection than by the mouth?—Yes, but better still by inunction.

5865. You think inunction would be quicker?—Yes, than either of the others.

5866. You give an average of 22 days' sickness for syphilis. That is about the time they would take for their three injections?—Yes.

5867. But they would go on with the treatment?—Yes, with treatment afterwards by mercury.

5868. Speaking of the comparative values of salvarsan and neo-salvarsan, you say that neo-salvarsan is less stable. In what way do you mean, that it does not keep?—The direction that is given with each tube states that it should not be kept, as changes occur in its composition.

5869. For how long do you keep it?—Salvarsan was kept for 10 to 15 minutes, but now neo-salvarsan not longer than 5, this is dissolved and injected straight away.

5870. You say that neo-salvarsan must be given with some care. What are we to understand from that?—Only that it must not be kept standing and must be made up with a cold instead of a warm solution as salvarsan is.

5871. But the preparation of salvarsan is much more difficult and complicated, if I may say so, than neo-salvarsan?—Yes, it is.

5872. And a great deal depends on the accurate measurements of the reagent that is introduced?—Yes, of the sodium hydroxide.

5873. Then in regard to these cases of extra-genital chancre, you say they were all cases of syphilis. Was there any evidence of that?—Evidence of what?

5874. That they were not contracted by parties with some disease present. For instance, take chancre of the lip. How was that syphilis started?—The history given by those cases was one of accidental infection. Of course, we can only take the man's statement for it.

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5875. Some of those statements might be received with a certain amount of doubt, I think?—Yes.

5876. You made a statement as to the identity between syphilis and soft chancre. I do not think you meant to convey that, because the two diseases must be absolutely separate and distinct from one another?—Yes, I meant to convey that most of the lesions called soft chancre are really early syphilis.

5877. You mean to say they are inoculated with the two diseases at the same time?—Yes, I do not think you get a true Hunterian chancre in such cases, except, perhaps, very late.

5878. No, not necessarily, but the aspect and the history of a soft chancre is so absolutely different from that of syphilis. If you get a true soft chancre it should be very easy to distinguish it from a syphilitic sore?—Yes, if you can depend on the statement of the date of infection, otherwise—no.

5879. And 77 of these 300 cases were definitely soft chancre?—Yes.

5880. And they healed and nothing further happened?—Yes.

5881. (*Mrs. Creighton.*) The total number of cases treated is given at over 4,000. During what period of time were those cases treated?—From December 1910 until September 1913, about 2½ years.

5882. You have two sets of primary syphilis on the second page of your statement—primary syphilis with positive reaction and primary syphilis with negative reaction. I suppose those were men who came to you very early?—Yes.

5883. Almost immediately after infection?—Yes.

5884. Is it the case that sailors are very apt to come to the doctor immediately after having been on shore?—If they have got any infection then I think they come directly they notice anything.

5885. But you do not think they come to you before they notice anything, as a precaution simply?—No.

5886. You do not recognise the ordinary division into primary and secondary syphilis, I understand?—I have had to do so here to fall into line with the statistics of other hospitals.

5887. You do not think there is a real division?—No, I do not think so.

5888. (*Mrs. Scharlieb.*) Had you anything to do with women and children or was it only men?—Only men.

5889. (*Dr. Mott.*) I suppose you make a great distinction between the degree of success in the treatment of primary syphilis with a negative Wassermann and of primary syphilis with a positive Wassermann, from the fact that, if you have a negative reaction, the organism is not generalised in the system?—Yes.

5890. So that you would like to distinguish between local and generalised syphilis?—Yes, but only so far as the primary lesion is local.

5891. It is a local condition, but so soon as the organism gets into the blood stream it is generalised?—Yes.

5892. Did you find out whether these cases of reinfection were cases which had been treated quite early?—Yes, they were all treated quite early.

5893. Therefore, it bears out what we have been saying?—Yes.

5894. Then I notice you rather objected to the fact of reinfection implying the eradication of the organism from the body—that is of cure?—I think it is an extremely difficult subject and one on which there is certainly variation of opinion.

5895. But is it not the best evidence you can have?—I think it is the best evidence we have got; but I do not think it is infallible.

5896. What other evidence can we have of cure?—None.

5897. You have a negative Wassermann and then you get a sore on another site than the original sore?—Yes.

5898. That agrees rather with the experiments made by Neisser on anthropoid apes. He insists that reinfection is the only proof of cure?—Yes.

5899. Then your results show that it is much more difficult to obtain a negative reaction the later the disease is treated?—Yes.

5900. You are aware, I suppose, that the majority of cases of what might be termed quaternary syphilis, (parasyphilis) occur in people who have had a very mild primary infection and whose secondary symptoms were not very distinct?—Yes.

5901. Therefore, the treatment did not take place until generalisation had occurred in the body?—No.

5902. Consequently, you think that if the cases could be treated quite early, before a positive Wassermann reaction occurred, a great many of these late manifestations of syphilis would be prevented?—Yes, I think they would.

5903. With regard to the mental cases that you gave, I suppose by "mental cases" you mean men who would be certified as insane?—No, not definitely, because those are cases which come in with some history, or having given some evidence of mental defect, and they may come in for observation of their mental condition, before certification or discharge from the Service.

5904. They are in observation wards. There is an asylum, is there?—No, they are in the mental wards of the hospital.

5905. You have not included those cases?—The cases are all those admitted to the mental wards.

5906. Did you in those 47·4 positive Wassermann cases do lumbar puncture?—No, those were done simply from the blood.

5907. Then you have no proof what percentage of those people really had infection of the nervous system, have you?—Except from the fact that if the blood gives a positive result then, almost surely, the cerebro-spinal system might be affected.

5908. Not at all, because there are loads of people walking about who would give a positive Wassermann of the blood?—But, of course, having got general infection as evidenced by a positive reaction of the blood, they might also have a positive cerebro-spinal fluid. It is not a definite proof of the causation of mental disease but a factor pointing strongly to it, and to back this up I have inserted the table at the bottom.

5909. I suppose some of these cases were general paralytics?—Yes, some of them were.

5910. And all those cases would have given a positive Wassermann with the fluid?—Yes.

5911. You think this treatment by salvarsan and the early diagnosis may really considerably diminish the number of cases of syphilis of the nervous system which occur?—I think it will enormously.

5912. It will not show its effects very markedly in the late manifestations for some time yet, will it?—You mean if you treat the late manifestations of syphilis?

5913. No; I mean that the effect of this new treatment will not be very observable in the cases of general paralysis and tabes, because the average time is ten years?—Yes.

5914. So that some time must elapse yet before the results of salvarsan show themselves?—Yes; of course we have no figures yet as regards that.

5915. I notice you draw a comparison between the number of mental cases in 1902 to 1906 and 1907 to 1911. They drop from 571 to 331?—Yes.

5916. Do you attribute that fall entirely to the treatment by salvarsan?—Not by salvarsan, because it had been falling before.

5917. That was because of the more efficient treatment by mercury?—Yes, very much more efficient treatment.

5918. At what age are men discharged from the Navy?—At varying periods. For instance, after their first 12 years of service they are somewhere about 30. They then may take on for another 12 years and not leave until they are something like 42 or 44; and they may go on much longer than that.

5919. There is much longer service in the Navy than in the Army?—Yes.

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5920. So that a greater number would come within the age when locomotor ataxy and general paralysis comes on, in the Navy than in the Army?—Yes.

5921. You find, I suppose, that a certain number of individuals who are treated systematically with salvarsan and mercury—the intensive treatment—nevertheless continue to give positive Wassermann?—Yes.

5922. You have the same experience, then, as they have in the Army?—Yes.

5923. And you are keeping a watch on those cases to see what develops later?—Yes. Most of them are under mercurial treatment still.

5924. Do you think it is possible that those cases are cases which will develop general paralysis?—I think it is possible.

5925. Why do you think so?—The fact of their having continuous Wassermann reaction like that must be taken as evidence that the disease is not cured and at any time might develop latent symptoms of syphilis.

5926. You know that the organism can be found in the nervous system of general paralytics, and that it is extremely difficult to get rid of it?—Yes.

5927. So that you think that may be the explanation regarding these cases?—Yes.

5928. When you make a Wassermann reaction you use, I think, the cholesterin antigen of Sachs?—Yes.

5929. It is a very good modification of the original Wassermann?—It is.

5930. (*Canon Horsley.*) You said 5 out of 13 cases afterwards became reinfected?—Yes.

5931. And, of course, some would have returned to vice without being reinfected?—Yes.

5932. An Army doctor we had before us lately seemed to think that nobody who had gone through the experience of having the disease and the treatment ever subjected himself to the possibility of reinfection?—I do not think many do. It scares most of them, but some of them do.

5933. Five out of 13 seems to be rather a large proportion?—Yes.

5934. Of course, we should like to think that nobody ever did get reinfected. I notice in your statistics you ignore gonorrhœa altogether?—Yes.

5935. But does not gonorrhœa send men to hospital?—Yes, but I cannot give you offhand the exact number of days' sickness is due to gonorrhœa.

5936. I mean you show here that we lose as a nation so much vital force through syphilis, and any loss of that sort is of national importance. But should we not add to that what we lose in the same way from gonorrhœa as well?—Yes.

5937. That you do not seem to have given us?—No, it has been given before, but it is considerably larger than that due to syphilis.

5938. Then with regard to the deaths after salvarsan, of course, those are all deaths after treatment by specially qualified men?—Yes.

5939. If treatment were given by an ordinary medical practitioner there would be more many more deaths?—Yes, I think it should not be made general; I think it should be done institutionally.

5940. But the general practitioner might not be able to discover syphilis of the nervous system. He would see the man had a syphilitic disease, but he would not see the pathological change in his nervous system. That would be more difficult to find out?—I think it would require a thorough examination.

5941. He would not always give that thorough examination?—I think the majority of the medical men would carry out examination.

5942. If there was anything the matter with the nervous system salvarsan would kill the man in 24 hours, would it not? That is what Major Pollock says in a debate, I see, at Guy's Hospital. He is an Army doctor, is he not?—Yes, he is, but I do not agree with his statement.

5943. It would be better for the community to have a few experts to do it in a few wards than to have every general practitioner giving it. Or could it come within the province of every general practitioner? At the present moment we are told they have not had special instruction about it?—If they

have that special instruction then, undoubtedly, yes. If they do not have special instruction, then I think they ought not to give salvarsan. For instance, in a general hospital not very many years ago venereal disease was not taught very well. Nowadays I think it is.

5944. Is there any reason why a sailor should not have the privilege that soldiers have in regard to marriage?—The only reason is as regards the exigencies of the Service, shifting them round from place to place.

5945. Still, the moral and physical advantages are said to be great of a certain proportion of the men being married on the strength?—I think if they were allowed to be married on the strength it would reduce venereal disease.

5946. You have never heard any more conclusive reason than you give us against it?—Only the expense, and the fact that you cannot keep a ship lying up for any length of time in one port; cruisers are a necessary part of the Navy's work.

5947. Still, if an army man marries on the strength he may be ordered to India the next day, you know?—Even then the army people have an enormous advantage over us, and wives of families may accompany soldiers in troop ships, I believe.

5948. But you admit that it would tend to reduce syphilis and, consequently, national expense?—Yes, but it would create far more expense in having to build barracks and places for them.

5949. With regard to these cases of infection of the lip, were those mainly innocent infection, syphilis insontium?—Yes, innocent infection.

5950. In case of infection through using the same pint pot, we will say, must not there be some abrasion of the lip?—I think there must be an abrasion.

5951. There is an alarmist idea that the use of any common pint pot or cup would infect you with this disease without there being an abrasion at all?—No, I think not; an abrasion of the lip is so extremely common.

5952. There is a sort of "microbophobia" abroad in the world, and they think disease can get in without the front door being opened, that is to say, without any abrasion. Supposing somebody having the disease used a cup, if I drink from that cup I should not necessarily be infected, I suppose?—You would not necessarily be, but you might be.

5953. The chances are less?—The chances are less than if you had an abrasion.

5954. There used to be a lock hospital at Devonport, which was closed?—I know nothing about it.

5955. Do you know why it was closed; it was closed after the Boer war, was it not?—I do not know.

5956. You do not know why the Admiralty did not keep it open?—No.

5957. Was it simply a matter of expense, do you think?—I do not know.

(*Canon Horsley.*) It was very much appreciated in Devonport. They considered it quite a grievance when it was closed.

(*Chairman.*) I think we cannot examine this witness on Admiralty policy.

5958. (*Canon Horsley.*) You know there is not one there now?—I do not know at all. I have never been to Devonport.

5959. You have never been to Devonport?—I have not.

5960. (*Rev. J. Scott Lidgett.*) I did not quite hear your original answer upon which Canon Horsley based his question about reinfection. What were those 13 cases of which five became reinfected?—Those were cases which came back with a chancre which, to all outward appearance, was a primary chancre.

5961. Then it is not right to say that of 13 complete cures five were reinfected?—No; these were 13 cases in which it might be said they were reinfections. In eight of them there was no distinct proof, but the five were cases, so far as one could tell, of definite reinfections.

5962. Out of the whole number of those whom you treated?—Yes.

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[Continued.]

5963. (*Canon Horsley.*) I asked you what was the whole number and you said 13?—I thought you meant the whole number which might be considered as fresh infections.

5964. (*Rev. J. Scott Lidgett.*) Have you formed any idea from your experience what proportion of the Force might be held to be infected?—I have no idea of the percentage at all. It would be almost impossible to arrive at it.

5965. I asked the question because I still do not quite understand your contention, on the top of page 6 of your statement. I understand the figures of course, but I do not understand how they show that mental disease is largely caused by syphilis. Would you tell us whether that is simply based upon the results of the Wassermann test of a certain number of mental cases? If so, whether these mental cases had any peculiarities which led you to connect the mental symptoms with syphilis?—No, they were simply cases which came to us. It would not be fair, if you saw a case, to say "That is a syphilitic, I will take him and test his blood." I have taken every case that was sent up to the hospital with mental disease.

5966. But I understand that all mental cases are not sent to you. Is that so?—No; that is simply the number which were sent to Chatham Hospital. Of course other figures would be obtained for Haslar, and others again for Plymouth.

5967. But if anybody became insane in the Navy, and you gave him a Wassermann test and got a positive result, would that enable you to say definitely that the insanity was due to syphilis?—It points to the fact; but it might not have been, certainly.

5968. Have you any general pathological knowledge which connects syphilis with other forms of insanity, say general paralysis of the insane?—Only the symptoms.

5969. If you have the symptoms of syphilis and the symptoms of mental derangement in the same patient, you conclude that the mental derangement is due to syphilis?—Undoubtedly, it is the probable cause, but nothing more. It is not proof.

5970. Do you take it that these deaths from salvarsan treatment were due to the treatment being imperfectly administered or to something in the nature of an idiosyncrasy in the patient?—They certainly were not due to imperfect administration, because the same methods are employed in all the naval hospitals and most civil institutions. They occurred under my own hands and there was nothing at all to lead one to suspect any untoward result.

5971. I understood you to say that these cases occurred when the treatment was comparatively new. Have there been any recently?—I think the last one occurred in August or July 1913.

5972. You think under the best treatment there is a certain measure of risk with certain patients?—Yes there is.

5973. Do you see any way of safeguarding against that?—I think the safeguard is to give injections at monthly intervals, and treat your patients thoroughly with mercury meanwhile. I think then you would get a safer result than otherwise.

5974. Do you consider in those circumstances, even to the most dangerous patients that the risk would be infinitesimal?—No, not to the most dangerous patient. It depends entirely on what was constituting his danger.

5975. I mean dangerous from this point of view in regard to this treatment?—You must only deal with persons who are apparently healthy apart from venereal disease.

5976. You think there must be a standard of general health before you can apply salvarsan confidently?—There are many things which would lead to complications through giving the salvarsan treatment. These patients were most carefully examined, and all those things excluded before thinking of giving them the treatment.

5977. Then you think there are a good number of cases in the civil population which would not be amenable to this treatment if it were recommended for general public use?—There are many cases to which one would not dream of giving salvarsan.

5978. Have you anything to say as to the way in which such cases should be treated, for the benefit of the lay members of the Commission?—I think it is entirely medical. It depends upon the state of their kidneys and other organs; if they have nephritis or anything like that, you cannot give the treatment.

5979. (*Dr. Mott.*) Do you think there is the same danger with intra-muscular injections?—I have never had any experience of intra-muscular injections.

5980. (*Rev. J. Scott Lidgett.*) After these 22 days detention in hospital, do they return at once as fit to the station?—Yes, they return to their ships.

5981. All that is necessary then is continuous treatment—at intervals?—Yes, of course, we watch them, and do their Wassermann reactions at intervals.

5982. Would you say in the case of a civilian that he ought to give himself up to hospital treatment for 22 days?—No, I think it could be managed that a civilian could have his injection, remain in a day and then go out again.

5983. If that is good enough for the civilian, why is it not good enough for the naval man?—Because we have to keep them in hospital, partly for victualling reasons. If he comes into hospital and he immediately goes out again, it is simply complicating the victualling and other arrangements. It is for extraneous reasons and not for medical reasons.

5984. You want us to understand that there is no medical need to be detained for 22 days?—There is not.

5985. (*Sir John Collie.*) You told us that salvarsan and neo-salvarsan were very powerful remedies for syphilis and that the sooner the disease was treated the better. Do you think if you gave the civilian population the same advantages the Navy has, that the incidence of syphilis would be very much reduced?—I think it undoubtedly would.

5986. You speak of three injections of salvarsan and neo-salvarsan. Are we to understand that means that in the intervening period you have mercurial cream injected and so forth?—Yes.

5987. You presuppose that?—Yes; that goes on continuously during the whole of the treatment.

5988. If after your own systematic treatment—say two or three months as the case may be—you have a positive Wassermann and you continue to have it time after time, would you consider the patient cured?—No.

5989. Why not?—One only relies on the explanation which is given for the presence of the positive Wassermann.

5990. But is there any other evidence that we can get, apart from the absence of cutaneous manifestations, that the disease has been annihilated than the continuous positive Wassermann month after month?—No, I think there is no definite evidence that you can say a case is cured.

5991. Suppose that a series of neo-salvarsan injections make Wassermann reaction negative, and that in a few months you have a relapse and you get a positive Wassermann, and then by means of a further series of neo-salvarsan injections you again get a negative reaction, surely it is very strong evidence that you have got rid of the disease?—If you have a series of negative Wassermans without any treatment for one year, then it is strong evidence that the case, as far as we know, is cured; but it is not proved.

5992. I did not mean mathematical proof or legal proof; I meant medical proof?—No, I think you would find some of those would relapse; do not you think so, *Dr. Mott*?

5993. (*Dr. Mott.*) Yes, I do?—I am sure they would.

5994. (*Sir John Collie.*) You do not think the fact of a second primary sore after treatment is evidence of reinfection?—It is the best evidence we have of a cure.

5995. Then supposing you had treated the man for three or four months and then had negative Wassermann reactions at intervals of three months, and at the end of two years he said: "Doctor, I want to get married; may I?" what would you say?—You say he has had a negative Wassermann for two years done at intervals and with no treatment?

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[Continued.]

5996. Yes.—I should say he could get married.

5997. So that you would have at least that amount of confidence that the disease was eradicated in your opinion?—I admit possibly some of those would relapse; but, then, the number of people in the world you are going to debar from marriage is so enormous that you could not possibly carry out a more strenuous criterion of cure.

(Mrs. Burgwin.) I have no questions to ask.

5998. (Chairman.) Do you get any indication in your cases as to where the infection is acquired?—We get a history from all of them where they obtained the infection.

5999. Do they mostly come from abroad, or do they get their infection at home?—They are mostly at home.

6000. Have you any idea of the relative infectivity of Portsmouth, Plymouth, and Chatham?—I think they are all about as bad. Some towns seem to give rather a worse type of infection than others.

6001. They are equally bad in amount, but some are more virulent?—Yes.

6002. Do you discharge infective men, or do you try to keep them on?—We keep them always until they are uninfected.

6003. You keep them forcibly?—In hospital.

6004. Even after their period of service has expired?—Yes; we keep them in hospital until all active disease is gone. Of course, in cases of nervous disease we do not keep them.

6005. You have given us no evidence about gonorrhœa. Is it your experience that gonorrhœa is not increasing? The curves the Director-General gave us show there is very little diminution?—Yes, that is so.

6006. You do not see any signs of a reduction?—No. There is a certain amount of decrease, but it has

not any relation to the decrease which is occurring in syphilis. The decrease occurring in syphilis is due to a much better treatment now being given than was a few years ago.

6007. But you have no proof and no such treatment of gonorrhœa?—No.

6008. And you know of none?—No.

6009. You have a hospital for the incurably insane, have you not?—Yes.

6010. Where is that?—That is at Yarmouth.

6011. Do you think we could possibly get information from that hospital which would be of value to us? Yes, I think so.

6012. Those inmates are all incurably insane, are they not?—Yes. They must have been in the Service for a period of 12 years before they are eligible to come there.

6013. Then they are cared for for the rest of their lives?—Yes.

6014. (Sir Kenelm Digby.) I should like to ask one question. Is there in your experience a great deal of the disease amongst the destroyers and so on, on the stations on the east coast?—There is some; but the routine carried out in regard to destroyers is that periodical inspection by the medical officers of the parent ship is arranged for, and any man who has venereal disease is then taken out of the destroyer or submarine, because you cannot take proper care of them and look after them on the various destroyers.

6015. In destroyers they have to be very careful, and necessarily so, especially as regards sanitary arrangements?—Yes.

6016. I suppose the ordinary arrangements are rather dangerous?—Yes, they are very different to what is in a big ship.

(Chairman.) Thank you.

The witness withdrew.

SEVENTEENTH DAY.

Monday, 9th February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES, K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., C.B.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIER, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Dr. SIDNEY COUPLAND and Dr. C. HUBERT BOND called and examined.

6017. (Chairman.) You are a Commissioner in Lunacy, Dr. Coupland?—I am.

6018. And you also, Dr. Bond?—Yes.

6019. How long have you held that office?—(Dr. Coupland.) Fifteen years.

6020. And how long have you held it, Dr. Bond?—(Dr. Bond.) Two years.

6021. I shall examine you both together. If either of you wishes to supplement the answer of the other, I hope you will do so, and where you do not, I shall assume that you agree perfectly. You deal only with England and Wales?—(Dr. Coupland.) Yes.

6022. Are there similar bodies with similar administration in lunacy in Scotland and in Ireland?—Yes.

6023. We could get from those Commissioners similar figures to those you have given?—I should think so. I do not know whether their reports are so voluminous as ours, but I think, no doubt, you can.

6024. Broadly speaking, what are the general duties of a Lunacy Commissioner?—Of course, his primary duty is to look after the interests of insane patients, and to see that they are properly cared for. He has also to see that nobody is improperly detained in an institution.

6025. Are the Commissioners responsible for every person who is put under control?—Yes, every certified lunatic. Every certificate passes through the hands of the Commissioners, and is scrutinised, and if it is at

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[Continued.]

all irregular or insufficient it is returned or rejected; in fact, the Commissioners exercise a very stringent authority over the whole of the insane.

6026. And is the administration of all the public asylums in your hands?—No; it is in the hands of local authorities all over the country. It was once suggested that it might be centralised, but that view was not adopted.

6027. But you supervise, I take it, all the internal workings of these asylums, and make suggestions where you think the working is not satisfactory?—Yes. Our work in connection with them is mainly limited to giving advice.

6028. At the present time are there many lunatics in the country who escape coming under the purview of the Lunacy Commissioners?—There are a good many, but it is absolutely impossible to say how many. Every now and then, of course, cases come to our knowledge; but I have no doubt there are far fewer not certified now than there were, say, 10 or 20 years ago.

6029. All pauper lunatics, I assume, are put in the asylum if their cases are of such a nature that they require asylum treatment?—I should say all, or nearly all. Some, however, are retained in workhouses and never go to asylums.

6030. And they never come into your statistics at all?—No, not as far as these questions go. We only know of their numbers and we visit them in the workhouses. But we have no returns from the medical officers of workhouses similar to those we obtain from the medical officers of other institutions.

6031. Then among the upper classes, would there be many insane who never go into any asylum of any sort?—Yes, a good many. Several of them are in what we call "single" care, and, of course, a good many remain with their families, and are not certified at all.

6032. Would the number of insane who would escape coming into your tables be considerable?—I cannot say.

6033. Probably they would not be so large as greatly to vitiate the value of your figures?—No, I do not think they would vitiate them. (*Dr. Bond.*) The percentage would be higher among the private cases. (*Dr. Coupland.*) Not certified. (*Dr. Bond.*) Yes. (*Dr. Coupland.*) That is so. (*Dr. Bond.*) They would not vitiate the figures.

6034. Taking your Table 1. which deals with the totals, to begin with, it tells us you are responsible now for 109,682 lunatics, of whom 50,559 are males, and 59,123 females?—(*Dr. Coupland.*) Yes, in institutions. Those were at the end of the year 1912.

6035. That is your last year?—I do not know whether the return for 1913 is in yet, but it will be in very shortly to the end of last year.

6036. I should like you, if you could, to give us some distinction between a private and a pauper patient?—I have drawn attention to the fact that the distinction is not a very sharp one. Ordinarily, in the Lunacy Act the expression "pauper lunatic" or the term "pauper" is applied to a patient whose maintenance is paid out of the rates, either in whole or in part. However, in many places where the maintenance charge is refunded by the friends or the guardians, that patient is transferred to the private class. But, as a rule, a private patient has to pay more than his bare maintenance charge, because, besides that, there is, of course, the upkeep of the institution and so on to be paid for; so that, as I say, the custom varies. The word "pauper" is a word that ought not really to be used in connection with lunacy at all. Many people who are called "pauper lunatics" are not paupers in the ordinary sense whatever. They are merely people of small means who are quite capable of being maintained by their friends in asylums, but at low rates. So the distinction is quite an arbitrary one, and it is only by extremes you can draw a distinction between one class and another. That distinction has been drawn for many years and is still retained, and there are certain differences between the two.

6037. Broadly speaking, we may take it that a pauper, in your returns, is a person whose whole

maintenance is provided; whereas a patient in a private lunatic asylum may pay a very small proportion, and does pay?—Yes; and, of course, there is a high scale in some institutions, and very considerable sums are paid.

6038. Your figures give us as to males: 3,706 in the private class and 46,853 pauper patients; the corresponding figures for females being 5,577 private patients and 53,546 pauper patients?—Yes.

6039. Before we enter upon questions of syphilis and insanity, will you tell the Commission exactly how your diagnosis of syphilis is arrived at?—As Commissioners, we only deal with the returns that are made to us; that, of course, is understood. Those returns come from a great many institutions. There are as many as 95 public asylums in the country, and the returns vary very much in accuracy and detail; for the personal equation is, of course, very large indeed. It is only of late years that returns have been made on an extended scale with regard to the causation of insanity, and much greater accuracy has been aimed at. But in order that the returns should be analysed and those rejected in which no information at all was given, there are four categories or headings under which these returns respecting causation are made. In the first there is very definite information indeed; so much so that in the opinion of the medical man he can say which cause was the chief one in producing insanity. There, again, of course, we have to trust to his personal opinion, and variations will occur in different institutions. The second head is that in which, although it may not be possible to make such a distinction, the facts obtained of the different cases are sufficient to justify their being recorded, and also to affirm that the information is all that could possibly be obtained. That leaves two categories in which the information is very imperfect, so imperfect that it is impossible to state definitely which is the cause, and the other in which no information at all was obtained. Consequently you will find in some of these returns we have eliminated all those in the last two categories in order to get a more accurate result. But we are not responsible for the diagnosis of syphilis. It is only made to us by the medical men who examine them in these 95 different institutions. Therefore we do not lay much stress at all on this part of our subject. As we were asked to appear before you we did the best we could from the information in our possession. Although it has cost much labour, I am afraid there has not been a very adequate return for it. You must not, I think, take the results except just on their face value. They did not, I am afraid, lead us to form any definite conclusions.

6040. Leaving out the difficult question of causation, and turning merely to that of where syphilis is present in the lunatics, we must take it there has never been any special examination by the Wassermann test or by the microscopic examination of these patients who are returned as syphilitic, but that the observation has been clinical or by inquiry from the patients themselves?—Yes, in the vast majority of instances. There is no doubt in some asylums medical officers have applied the Wassermann test more frequently of late years; but it is not done by any means universally.

6041. But it has been properly done on such a small scale in asylums that we must assume there is an enormous amount of syphilitic taint which is not revealed in your figures?—Yes, I quite admit that.

6042. Then I see it was not until the year 1876 that the causes of insanity first began to appear in your statistics?—Yes.

6043. And from that time onwards I suppose there has been a gradual tightening and obtaining of better evidence, so that in the later group of years it is probably more satisfactory than the other ones?—Yes, it would appear so from the mere fact that the proportion of cases of venereal disease and syphilis has increased.

6044. That is evident, I see, in this first year, 1876, when you get a proportion of 0.4 per cent. of total admissions for the year, the males being 0.6 and the females 0.2. Then in the 44th Report you get 0.8

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[Continued.]

for the males and 0·2 for the females. In the 48th Report the yearly average ratios for the five years 1888 to 1892 were published, and since then you have given regular quinquennial averages, have you not?—(Dr. Bond.) I think only in earlier years. If I may say so, supplementarily to that last question, only the most obvious cases of syphilis were really included—I am speaking of 20 years ago—because so much attention was not called to it as a probable cause of several forms of mental disease. It was only the gross or easily observed cases that were recorded. I think that would explain a good deal of the upward rise in the proportion.

6045. Then in that first group of ten years, the male patients with a venereal history give a percentage of 1·8 in the private class, and the pauper patients give a percentage of ·06; that is to say, the proportion of such males in the private class is three times as great as that amongst the pauper patients, and to some extent that difference seems to be consistent throughout?—(Dr. Coupland.) Yes, it has always been so, almost from the very commencement.

6046. But between those two sets of years, while the males have gone up steadily in numbers, the females apparently have remained the same?—The females have gone up also.

6047. That is true in both cases?—Yes. The females have gone up, but not to such an extent; private patients, ·2 and ·7; paupers, ·2 and 1·4.

6048. Then we come to 1907, and there, both in your figures and in the Registrar-General's, a more scientific classification was introduced, so that we may hope these later figures are more trustworthy?—Yes, I hope so.

6049. In your new schedule you have made, I suppose for the first time, a separation between acquired and congenital syphilis?—Yes; that was never done before.

6050. That distinction is always now maintained?—Yes.

6051. Do you think, apart from the total of syphilitic investigation, that the drawing of a line between acquired and congenital syphilis can be trusted?—Yes, I think that is quite definitely so.

6052. Do you find it is easier to distinguish by clinical observations congenital syphilis from acquired syphilis?—Congenital syphilis, I should undoubtedly say. (Dr. Bond.) I should say so. (Dr. Coupland.) With all deference to Dr. Mott, I should think so.

(Dr. Mott.) I should doubt it from recent results.

(Chairman.) You think that the congenital syphilis is more easily observed, and is therefore less concealed than acquired syphilis?—Yes, undoubtedly there is a good deal of concealment. (Dr. Bond.) I think we both mean by that with respect to the ordinary clinical signs of the disease.

6054. It is more obvious in the one case?—(Dr. Coupland.) Yes, much more obvious. (Dr. Bond.) Yes.

6055. Therefore the least careful doctor in the asylum is more likely to notify congenital syphilis than acquired. He is less likely to miss it?—(Dr. Bond.) Yes, I think so, with respect to the ordinary clinical signs of the disease.

6056. Then you allude casually to the distinction between whether syphilis is the principal or a contributory cause of insanity. I suppose that is a very difficult question?—(Dr. Coupland.) Very. I should think almost impossible to answer.

6057. That is a thing one can hardly deal with?—Yes.

6058. In fact, you go so far as to say you think that may be disregarded?—On the other hand, a little later I do mention how very frequently some of them have used the word principal, and how many of them have found it to be the sole cause.

6059. Taking Table 2, which is interesting, you give the total number of direct admissions for a long series of years, from 1888 to 1912. It is curious to note that there is a steady and rather rapid mount up to the year 1902, where you attained the maximum, of 22,622 admissions?—Yes.

6060. Subsequently there is a drop, and the figures do not greatly vary now?—No, not of late years.

6061. And there is no sign in 1912 of any great increase of insanity among the general population, which is satisfactory?—No; that is so far as admissions are concerned.

6062. Is there any reason why this steady mounting up to 1902 should occur?—No; I think that 1902 is a little inexplicable. There is one curious fact about it, and that is that in that year there were some large asylums opened, and it is a curious thing when a large asylum is opened it apparently increases the number of lunatics.

6063. Then, taking the increase of estimated syphilis in the group, 1879 to 1888, in private asylums 1·8 per cent. of males are returned as syphilitic, but if you go to 1912 the corresponding figure is 11·8?—Yes.

6064. Which shows a very large increase?—Yes; an increase which we think is mainly due to more accurate investigation, and very much below the mark than 11·8 would be.

6065. Probably. And all through, both private and pauper patients, both male and female, there is a large increase in the statistical record of the incidence of syphilis between 1888 and 1912?—That is so.

6066. Then you are of opinion that it must not be inferred that this increase which the figures plainly show in each sex and in each class, denotes an increase in the actual prevalence of syphilis. Can you explain why we should not regard that as being so?—The only explanation I can give is I believe that in either, in fact I am positive, the number is very much below what it should be. I also believe there is far more care taken in investigation, and, as Dr. Bond suggests, more attention, is being paid to this actual subject, and that will explain another reason why there is an increase in the figures. But I think I may say that these do not represent anything like the real proportion of syphilis amongst the insane. We have no evidence that this increase means an increase in prevalence of syphilis amongst the insane.

6067. On the other hand, there is no real scientific reason from these figures to suppose that there has been any diminution?—No; on the other hand I am afraid we cannot infer anything from them. That is why I say the labour we have given seems almost lost.

6068. But even if we could make a close investigation of the present lunatics, not having a clear comparison with the past we should have nothing to go on to make a comparison of the relative prevalence of the disease?—No, I am afraid not.

6069. You point out that during the whole period there has obtained a preponderance of the proportion of male cases in private and also in the pauper cases and also a similar but less markedly high incidence of the male pauper than those in the private class. Do you think we might take those figures as representing possibly a proportion if we had better and more accurate diagnosis of the total number of cases?—Yes, I am inclined to think so. I fancy it agrees with what others have found; that amongst the private patients or people of the private class the males are in a higher ratio than they are in the pauper class as far as syphilis is concerned, and that the reverse holds good with regard to females. It has come out in our returns ever since they were started, and I fancy other experts will confirm that.

6070. In 1907 you adopted a plan in respect to the ætiological factors of insanity which you say enables the distinction to be drawn with fairly accurate results except in so far as they are affected by the personal equation of the people reporting. You think that is so?—Yes, that is our feeling in the matter.

6071. As your figures are now constructed, you say it is possible to entirely eliminate from the calculation every case in which either, (1) no ætiological factor was ascertained or the history was too imperfect to allow of this, or (2) no such factor could be definitely assigned in spite of full history and observation; and that is your present classification?—Yes, that is so, with that limitation.

6072. Then amongst that very large number of people about whom no definite information was obtained

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[Continued.]

at all, there seems to be a very large proportion of syphilis?—Yes, I should think very large. You see there were over 16,000 cases which fell into these categories, and there is no knowing how much syphilis might be amongst them.

6073. In fact, of those total figures there were 79,761 cases of insane persons concerning whom no definite information was obtainable?—No, I think that is in the line above. After stating those in which there was no information, we say: "there remain, therefore, 79,761 cases of insane persons" of whom there was definite information; that is the number we deal with, the 79,000 with histories.

6074. Yes, I beg your pardon. It is more than half?—Yes.

6075. In dealing with those 79,761, of whom you did record definite information, you got 10·3 per cent. of males who had a history of syphilis and 1·6 per cent. of females?—Yes.

6076. Was that all acquired syphilis?—Yes, all acquired. Perhaps I may specially draw attention to the fact that these are simply the pauper patients; you are not dealing with the private patients.

6077. Those were all acquired syphilis, and in addition there were so many cases, which gave percentages of 10·6 males, and 2·0 females, which were congenital cases?—Yes.

6078. Table 3 makes a geographical distribution of these proportions, and the results seem to me rather curious. Taking males first, Portsmouth stands at the top as the worst place, Plymouth is second, Croydon third, and Newcastle is fourth. Some of the seaports, such as Bristol, Hull, and Sunderland are comparatively speaking low. May we take it that these asylums cover the areas that their names indicate; or that there is a great deal of transference goes on from worse infected places, which vitiates the figures?—Not so much (as far as boroughs are concerned, as with regard to county asylums. I think probably in all those you have named, they are fairly limited to their own people.

6079. You have nothing that can explain this curious thing, except that it is not unlikely that Portsmouth and Plymouth would stand high from what we know. In Table 4 you introduce counties, and there Brecon and Radnor stand a bad first, London County and City second, and Hampshire and the Isle of Wight third. Brecon and Radnor, you say, must not be considered in this connection, because they have not been fairly treated?—No. It was rather a shock when one found them so high, but inquiries were able to discount that information, as will be seen in the footnote.

6080. But in this return there are 11 asylums all allotted to London County and City, and they give you high results?—Yes, they do. I think it ought to be borne in mind that the London asylums are amongst the best equipped asylums in the country, and the men are keen about their work, and I think that is one explanation why we have got such good returns of syphilis from them.

6081. The doctors have made more full investigations?—Yes.

6082. In your Table 4, are you dealing with counties or administrative counties?—I expected that question. Really, I suppose it is administrative counties; they are all counties which have county asylums, and I imagine they are administrative counties.

6083. (*Dr. Arthur Newsholme.*) Might I ask a question on that point to save trouble afterwards? Would that mean that the statistics of the county boroughs in the geographical counties would be excluded?—In the table I have handed in I have not separated the administrative asylums from the county boroughs. I have included the borough asylums in that county.

6084. So that in the county of Hampshire, the statistics of Portsmouth will appear again mixed up with the rest of the county?—Undoubtedly they will. It is quite a different table. It was made in order to compare one county with another if possible. They are not counted twice over.

6085. The point was that a previous table has given statistics for county boroughs separately?—Yes.

6086. Now comes a table giving statistics for the counties?—Yes, including the boroughs.

6087. Therefore, statistics for Portsmouth are in the mass of statistics for the county of Hampshire?—Undoubtedly. That was done with a definite object. Of course, we can easily produce another table showing the counties separate from the boroughs. But I drew attention to the boroughs because it seemed to me the rates in some of these boroughs fully explained the high rate in the county at large.

(*Chairman.*) In Table 5 you divide up the forms of insanity under a great many heads, and taking the first form, congenital or infantile mental diseases, under two heads, epilepsy and without epilepsy, the total percentage of both sexes is 13·6 per cent. for intellectual madness with epilepsy and 32·3 without epilepsy. I think we have had some evidence which goes to show that syphilis is more present in cases where epilepsy is superadded, have we not, Dr. Mott?

(*Dr. Mott.*) I do not remember that evidence has been given. That was the opinion of Lady Kate Fraser, who worked at it in Glasgow, but we have not had the evidence before us.

(*Chairman.*) It is rather curious that cases with epilepsy show a very much less percentage than those without.

(*Dr. Mott*) Yes.

6088. (*Chairman.*) In acquired syphilis the same phenomenon shows itself: 0·1 with epilepsy, 0·4 without; showing a greater proportion in both cases. Now, turning to the horizontal column dealing with general paralysis of the insane, we get 24·7 per cent. of cases recorded as congenital and 62·3 per cent. recorded as acquired, showing a very much larger extent of general paralysis due to acquired as compared with congenital syphilis?—Yes.

6989. Those are the main figures, the epileptic patients and the general paralytic patients?—Yes.

6990. In connection with that table, you say it is not possible to affirm that syphilis plays no part in the production of mental disorder, even in those cases where the association is comparatively infrequent. What do you quite mean by that?—The table we have just been considering shows you the proportionate number of cases of general paralysis in the total amongst all those who are supposed to have syphilis, and it also shows the other forms of insanity besides general paralysis, as you notice. It is impossible, it seems to me, to affirm that the syphilis did not take part in the other forms where the percentage was not very high. Indeed, we go on to say that "our returns show that in the opinion of medical officers who made those returns."

6991. Those are the medical officers in charge of asylums?—Yes, who made the returns—"it is often the chief factor amongst all that can be assigned in connection with the insanity." Then we set forth the proportion amongst those different forms of insanity in which syphilis is considered by them to be the principal factor. You see we say 60 per cent. of the cases.

6992. You give 60 per cent?—Yes, in which it was said to be the principal factor.

6993. By "principal factor" you mean the determining cause?—Yes, I presume that was in the mind of the medical person.

6994. Because if it were absent, the person would not have become a lunatic. Is that it?—No. It was the leading factor out of several. Of course, there may be half-a-dozen or more different causes co-operating to upset a man's mind; but one, perhaps, stands forth.

6995. When you come to general paralysis, syphilis, you say, was regarded as the principal cause in 76 per cent.?—Yes, it has come down in that way. You will see there are other forms of insanity in which it also was thought to play the chief part.

6996. But in the case of general paralysis, it is quite possible it may be the principal cause in 100 per cent., is it not?—It is quite possible.

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6097. In the case of brain lesions you allow 45 per cent. ?—Yes.

6098. In the case of secondary dementia, 43 per cent., melancholia 34 per cent., mania 31 per cent., and of primary dementia and of insanity with epilepsy 21 per cent. Those, I suppose, are rather speculative percentages ?—Quite; it is simply, as I say, the opinion of the medical officer who reported the cases. It comes out in that way. The point, of course, I meant, was that syphilis may play a part in all these different forms of insanity; but a larger part in some and a smaller part in others.

6099. And, as I think you have said, the determination of the principal cause must always be exceedingly difficult ?—Yes, and perhaps ought not to be regarded.

6100. Then taking the antecedents to an attack of insanity which have been most frequently associated with acquired syphilis, you enumerate them as alcoholic intemperance, states of destitution and privation, degenerative changes of blood vessels, and gross cerebral disease. And those last two, I think, quite rightly, you show in most cases as syphilis. Then you note the further important point in case of insanity, that with the antecedents of syphilis the aetiological factor of mental stress is not infrequently present. But, as you have said, these distinctions are drawn largely by questions put to the patient himself ?—Yes.

6101. And he may not, I suppose, always give you accurate answers ?—Quite so.

6102. He is very likely to conceal the fact that he has had syphilis at any time of his life, or that his father had it ?—Yes.

6103. In regard to general paralysis of the insane, you have brought together some more figures, and you have taken 103,842 persons, or nearly four-fifths of the known insane, and you have analysed the amount of paralysis among that number, have you not ?—Yes.

6104. Nearly four-fifths of your total ?—Yes.

6105. Then you find that the daily average number of patients is 2.3 per cent.; that is the proportion of paralytics to this whole number you have given us ?—Yes.

6106. Only 2.3 per cent. ?—Yes.

6107. And you arrive at the figures that the ratio of male cases of general paralysis was 3.8 per cent., and of the female cases 1 per cent. ?—Yes.

6108. So that the total number of paralytics among all your insane population is not very large ?—No, not proportionately.

6109. You say the numbers and ratios vary considerably in the different institutions, and they vary from 9.2 to .2 per cent. That return does not distinguish between the private and pauper patients, and those having a larger proportion of patients of the former class may be expected, especially as regards males, to yield higher rates than those asylums which do not receive private patients. So that there is probably a correction of those proportions ?—Yes.

6110. In different parts of the country they would be found to be very different figures ?—Yes.

6111. In Table 6 you deal with the county and borough asylums for the years 1910 to 1912, and you give the average for those years, I presume, of the proportion of cases of general paralysis. The highest in that case appears to be at Scalebor Parle, Yorkshire, which gives 18.8 per cent. of male and 2.5 per cent. of female patients, and 9.2 per cent. of persons. Yorkshire, therefore, stands far higher ?—That was only one asylum, and not a very large one. It is a county asylum which is limited to private persons. I think that is the reason why it stands so high.

6112. That is an instance of private patients ?—Yes, the rate is higher amongst private patients.

6113. Then the variation is very great ?—Very great.

6114. From 9.2 for this semi-private asylum in Yorkshire down to 0.2 for London County Manor Asylum ?—Yes, which is limited to women only.

6115. I suppose there is nothing we can deduce from this table except that there is an immense

variation of incidence in different parts of the country ?—Yes.

9116. Must one suppose that is accidental, or is there likely to be any law which would explain it ?—(Dr. Bond.) The Manor Asylum is quite accidental.

6117. You think it is accidental ?—The Manor Asylum is entirely accidental. It so happens that they select only female patients of a particular type which would not yield general paralysis. There is nothing in that percentage at all.

6118. But of course of a great many others it may be said ?—(Dr. Coupland.) I think the figure just above shows it.

6119. The Leicester and Rutland County Asylum is very low ?—Yes, that has a very low figure. I should like to point out that that gives you the whole number of patients in that asylum on a certain day. It is a return which is made to us on the last day of the year, and we have kept those returns for three years. It is a sort of census. The return applies to asylums, and asylums in one part of the country may receive patients from another part of the country; so I am afraid we cannot say that, because in that asylum there were so many general paralytics, therefore that part of the country has that number of general paralytics; but that is an accurate return of the percentage of paralytics that were in those different asylums at the end of the year.

6120. I understand that ?—It is perfectly correct. Wide as the variations may be, they are perfectly correct.

6121. We may take it those variations do occur ?—Undoubtedly.

6122. Even if there are no means of statistically explaining them ?—Yes.

6123. Then, turning to your note on the number of admissions, at the bottom of page 5, in the year 1888, the number of cases of general paralysis amounted to 9.1 per cent of the total admissions; but in 1912 it had dropped to 7.7 per cent. ?—Yes.

6124. And those figures we can take as accurate, that there must have been that drop between those two years ?—Undoubtedly, as they were returned.

6125. At all events recorded ?—A diagnosis of general paralysis was made in that proportion of cases.

6126. Then in 1902 the percentage of general paralytics was 6.1, which is the lowest you say in the whole period of 25 years. After that it began to mount again. Then from your Table 7 we see that the percentage was 8.8 in the first quinquennium, 7.7 in the second, 6.6 in the third, 7.0 in the fourth, and in the fifth 7.4; so that it fell, and then rose slightly up to the last quinquennium. In Table 8, you group the kinds of asylums together for the purposes of giving the figures. All the private patients are grouped into five different asylums, of which you give the figures ?—Yes.

6127. And from that of course the Royal Naval Hospital at Yarmouth stands out far above the others ?—Yes.

6128. I think you can explain the reason for that ? Yes; I think the reason no doubt is because the officers and men who are cared for are men who are still in the Service, or perhaps retired from the Service owing to their ill-health, and they are pensionable; therefore, later in life than those who are taken into the Military Hospital.

6129. They go there, and live there till they die ?—Yes; it is a comparatively small institution.

6130. But the important thing about this table is the private patients give a total percentage of 7.6, and the pauper patients a total percentage of 7.5 ?—Yes, almost the same.

6131. Showing that there is very little difference in the percentage of paralysis between the private and the pauper institutions ?—(Dr. Bond.) Yes, when spread over that way.

6132. In Table 9 you give us another geographically constructed table from England and Wales separately. There are many other curious points in that, but I do not suppose any explanation can be given. Northumberland heads the list for England, and Glamorgan heads the list for Wales. It is certainly curious that

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the next in order are considerably below. Those two stand out?—(*Dr. Coupland.*) Yes, they do.

6133. That is county and borough?—Yes, the boroughs are included in the counties. Glamorgan includes Cardiff, and Northumberland will include Newcastle.

6134. Then Berkshire has the highest percentage for women, which I suppose has some explanation?—I should not like to give one.

6135. The contrasts in these tables are so striking. We have the Cumberland and Westmoreland and Denbigh group, and five counties which have no women paralytics at all?—That is so.

6136. Does that mean there are none in the asylums?—None in the asylums. These are the admissions for the five years 1908 to 1912 in the asylums of those different counties, and there were no females returned.

6137. There are women there, but they return no female paralytics?—There are a large number of women but no female general paralytics. (*Dr. Bond.*) They have an abnormal number of men in comparison with the other sex, there being at those asylums, *i.e.*, Cumberland, Westmoreland and Denbigh, more men than women.

6138. But for some reason the women do not become paralytic there?—That is right.

6139. It is very curious?—(*Dr. Coupland.*) Cornwall had 413 women admitted and no general paralytics amongst them. Worcester had 681 women and no general paralytics.

6140. Your total percentage which you give in the memorandum at the bottom of page 7 is 6·8 per cent. persons with general paralysis, of which 11·9 were males and 21·1 per cent. females?—Yes.

6141. Then you make a note of the extraordinary difference of the incidence between the different counties which I have called attention to?—If the Commission think it worth while I think the Commissioners would be prepared to take a census of the asylums in the different parts of the country, and so get quite an accurate return of the distribution of paralytics—much more accurate than I have submitted.

6142. On a particular day?—On a particular day, by seeing who are in residence on a particular day, where they come from, whether they are from the home county or an out-county, so that we could really put them exactly where they are about the country. It might modify that map considerably that I have handed in.

6143. I really think that would be very valuable if you fixed a day and had a general census?—If you would allow us to have some time.

(*Chairman.*) Yes, certainly.

6144. (*Dr. Arthur Newsholme.*) Stating the county of origin in every case?—Yes, the county and town of origin in every case.

6145. May I also suggest the county origin should be separated from the town origin?—Yes.

6146. (*Sir David Brynmor Jones.*) May I also suggest that when you have really commenced to work under the Mental Deficiency Act you might extend your statistical information into any institutions that come under you as the new board of control. You have not commenced to work under that Act, have you?—No, we do not commence it until the 1st April, and I hope we shall be able to get as definite information from them as we are getting elsewhere.

(*Sir David Brynmor Jones.*) It will be deaf and dumb, idiots, imbeciles, mentally defective, and moral imbeciles. They are quite new categories. When work is commenced under that Act, and a certain number of institutions come under the board of control, I think it would be very useful for our purpose to know if there are any syphilitics among these younger people.

6147. (*Chairman.*) But when will all this be done?—I should think it will take 12 months before any of these institutions are really in full working order; but still you may be sure we are very anxious indeed to obtain the fullest information with regard to the mentally defective, and we intend to as far as possible.

6148. But in any case you can make the census you have suggested for us within a few months' time?—Yes. Might I explain how we do it. The accommodation for lunatics in different parts of the country varies. In some counties they are very pressed indeed, and so they are obliged to put them out into other asylums by reception contracts, and patients are sent to more or less distant asylums. Now in some cases they are actually transferred from the home asylum to the county asylum, so, therefore, they do not appear in our statistics of direct admissions; but in other cases it is not so. They are sent direct from one place. I will give you, for example, Chester. The town of Chester has a contract with the town of Middlesbrough to receive its patients into the Middlesbrough Asylum. They are sent direct to the Middlesbrough Asylum and are entered as direct admissions into that asylum, but they are Chester people. The return I have handed in credits them to Middlesbrough. I have been unable to make the distinction, but if I have the census perhaps I shall be able to assign to Chester those cases of general paralysis that belong to Chester and do not belong to Middlesbrough.

6149. You have made some comparison between the cases in borough and in county asylums, I see. You have a percentage of 6·5 for the counties as compared with 8·3 for the boroughs. That is total persons. Of the male sex there are 11·5 per cent. in the counties and 14 per cent. in the boroughs. Of the females 2 per cent. in the counties and 2·6 per cent. in the boroughs. From that you deduce that there are considerably more cases of general paralysis in boroughs than in counties?—Yes, there is a higher proportion.

6150. But I suppose from what you have said we must regard those figures as requiring qualification. There may be a transference from borough to county, or from county to borough?—Not very often in that way. There may be in some instances, but not many. I think they are fairly accurate in the comparison, because the transfer is mostly not from the borough which has an asylum of its own, but from boroughs which have no asylums of their own. Boroughs which have asylums of their own generally manage to accommodate them all.

6151. In Table 10 you give us the numbers and percentage of cases of general paralysis in the direct admissions of male paupers. That shows very great variation again, 23·8 per cent. being shown for Plymouth, and 2·5 per cent. for Newport, Monmouth?—Yes, I think this may be taken as fairly representative of the different towns. There are but few out-county cases in these borough asylums, and nearly all their patients come from their own district. So I think no doubt paralysis does vary very much in the communities as appears here, striking as it is.

6152. We have had Plymouth, Newcastle, and Portsmouth before, but West Ham now creeps up to Portsmouth in this table?—Yes. It comes in the London area almost.

6153. And Croydon, whose figure is not very low in another, is comparatively low down, and Birmingham is quite low down. But except for Plymouth, Newcastle, and Portsmouth, there does not seem to be any very special connection between the seaports and the admissions for general paralysis. In Table 11 you deal with the age question, that is, ages during which paralysis occurs. I think those figures are important. Between the ages of 35 and 44, 42·7 per cent. of the whole number of paralytics; between 25 and 34, 18·3 per cent.; and between 45 and 54, 29·3 per cent. That works out at 90 per cent. of the cases that occurred coming within the 30 years of life between 25 and 54. That, you say, is the same for both sexes?—Yes.

6154. Then you point out, which is also interesting, that from this point of view there is no noticeable difference between the pauper and the private patients. That is interesting?—(*Dr. Bond.*) Yes, that is so.

6155. Your mortality tables, I suppose, all come into the Registrar-General's figures?—(*Dr. Coupland.*) With regard to that, may I make this observation, that in England and Wales in 1911, according to the last

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report of the Registrar-General, 2,201 persons died from general paralysis of the insane. From our returns from institutions there were 1685, so that about 75 per cent. of the total deaths from general paralysis of the insane in the country took place in the county and borough asylums. So that there is 25 per cent. of cases of general paralysis die outside institutions, which seems to us rather a large number. Of course there are workhouses. I ought to except workhouses.

6156. Workhouses are not included in your death Table No. 12?—They are not. I ought to make that exception.

6157. So that, besides workhouses, there are a considerable number of paralytics who die and do not go into your institutions?—Yes.

6158. I see that the proportion of deaths from paralysis to the deaths from all cases has varied as much as 16 to 20 per cent.—in the male sex from 24 to 30 per cent., and the female sex from 6 to 10 per cent. That is a very considerable variation?—Yes.

6159. When you say death from all causes, you are not meaning all causes affecting the insane, but all causes occurring in your institutions?—Yes, occurring in the asylums.

6160. Then you worked out the death-rate in 1912 in all your institutions, in fact, in regard to all the patients who are under your administration, as being 10·53 per cent. for men, and 8·19 per cent. for females. Then you go on to say: "The subtraction of all the deaths from general paralysis would reduce these rates to, for males, 7·76 per cent., and females 7·24 per cent." I do not know quite what you mean by that?—I ought to make a slight correction there. I think it is a very interesting result. If we take the whole number of people resident, and get the proportion of deaths amongst them, we find it is between about 10 and 11 per cent. males, about 8 per cent. females, and 9 per cent. for all persons. We will say, then, that 9 per cent. is the death-rate in institutions for the insane, but a large number of those die from general paralysis, and there are more men than women die from general paralysis. So, if we subtract from each side of the account those deaths from general paralysis, we will obtain a death-rate which is almost exactly the same for each sex. I have corrected these figures since I sent in that. For instance, last year, 1912, the death-rate was 7·9 per cent. for men and 7·6 per cent. for women, and 7·8 per cent. altogether. That is a very interesting result. If you put general paralysis aside, as if it had not been there—take it out *en bloc*—the men in asylums die at the same rate as the women. I do not think we have appreciated that hitherto.

6161. Have you any idea how many of your institutions have the means of carrying out a Wassermann test?—Not very many I should think do it themselves, really. Fortunately, the number of clinical laboratories is increasing in the asylums, so that we hope in time it will be done pretty frequently. Still, there is not a very large proportion at present.

6162. If you are selecting two asylums, one that gives a very high percentage of syphilis as diagnosed by present methods, and another that gives a very low percentage, could you have all the inmates of those asylums tested for it by the Wassermann test?—I think we could no doubt be able to do that. Of course, the question would have to be submitted to our Board. I think the Board will give its sanction, and arrangements could be made.

6163. If you could arrange that, we will communicate with each other about the asylums to be selected, I think it might be rather valuable for us?—I am sure we should be only too glad to assist you in any and every way possible, and that seems to be an excellent way to do it.

6164. At your asylums is there any special treatment given to patients ascertained to be syphilitic?—(Dr. Bond.) I think so. The mere fact of, either by history or observation, any particular patient having had syphilis at some time in his life would not necessarily lead up to anti-syphilitic treatment, but where there is reason to believe that such would be beneficial, I think that one may confidently say it is put

into practice. I do not think the salvarsan modern method has been at all extensively practised. I have not heard of it. It may be in practice in some places, but I cannot quote the places. But with regard to the ordinary methods of treating syphilis, I think we might say with confidence they are adopted where there are points indicating the treatment is necessary. But from the mere fact that somebody has been the victim of syphilis, perhaps many years before, it does not follow the treatment will be put into practice on the off chance that that had something to do with his mental state.

6165. I suppose very few of those institutions have the means of even giving the salvarsan treatment at present?—I am afraid very few.

6166. In cases of the insane do you frequently come across a history of gonorrhœa?—Frequently.

6167. Is that noted?—Yes. I do not know that one can point to any systematic noting of it, perhaps, in the same way as there is of syphilis; but, certainly, in asylums which are in the forefront of investigating causes, that would be inquired into, and would be in the clinical records of the institutions, but it does not appear in our tables anywhere specifically as gonorrhœa.

6168. I suppose the Commissioners have really no powers of insisting on or encouraging research into these very important questions in the asylums?—Only moral persuasive powers.

6169. It depends on the enlightenment of the local authorities?—Yes; and the enthusiasm of individual men, which I suppose is the same in everything, not merely the study of insanity, but all other investigations.

6170. And you have no word to say in the appointment of the doctors to these asylums?—No, none.

6171. That is left also to the local authorities?—That is so in all the public asylums.

6172. The qualifications are probably very varied?—Yes, that is so.

6173. (Dr. Arthur Newsholme.) With regard to the qualifications of the doctors appointed at these asylums are they not usually promoted from junior posts at the asylums?—I should not like to use the word "usually" with respect to individual asylums. Promotion takes place usually through the ranks of an asylum up to the senior assistant's position. If the superintendent's position is vacant that is usually filled after advertisement, taking the country as a whole, and not necessarily by the senior at that institution, but we may say invariably, with extremely few exceptions, the senior assistant of some other asylum.

6174. Then of these 95 public asylums in the country, the vast majority of the superintendents are men who have had previous experience of the treatment of lunacy?—Yes, certainly. I think we may say almost without exception now.

6175. Your evidence, Dr. Coupland, has dealt chiefly with the prevalence of syphilis among the occupants of lunatic asylums. I should like to ask you a question or two about research into mental disease. I believe I am right in saying that you are very much in favour of additional research into the causation of mental diseases?—(Dr. Coupland.) Yes, undoubtedly.

6176. Am I justified in asking you whether you have made representations on that point?—Yes, we have made very strong representations and I am thankful to say we have received very encouraging replies and I hope we shall be able to do a great deal to encourage research.

6177. And you are hoping that very large sums of money will be placed at your disposal with a view to research on the causation?—Not large. No sum is large, but I think I may say when we are a board of control we shall have a sum placed at our disposal. That is definite.

6178. And that I believe will be the first sum of the kind?—That will be the first of the kind.

6179. And that will be administered by the Commissioners of the Band of Control for the undertaking

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of specific research into the causation of different mental diseases?—Yes, in connection with asylums.

6180. Apart from research of that kind, a great deal of important work can be done as to the prevalence of syphilis among insane people if the Wassermann reaction were available in every asylum?—Yes, undoubtedly.

6181. And I take it you would be in favour, if not of the provision of facilities for this test in the asylums themselves, at any rate for having access to such facilities in the county or county borough?—Undoubtedly, and I do not see much difficulty myself in the way of having facilities in each asylum. Dr. Mott will correct me if I am wrong, but I presume the actual technique is not very difficult to acquire.

6182. I am told that the Wassermann test can be done with great economy on a large scale, and that if, for instance, at Portsmouth, they had facilities in the borough for the whole of the town, they might serve the asylum as well. In that case it would be an economy to have it for the whole of the borough?—Yes.

6183. I was not quite certain whether you were of opinion that the finding of a positive Wassermann might in some cases lead to improved treatment of patients. I gathered from Dr. Bond that unless there were symptoms indicating the necessity for anti-syphilitic treatment, a positive Wassermann would not necessarily be regarded as leading to such treatment. Perhaps Dr. Bond would answer that?—(Dr. Bond.) It is a little difficult to answer; it would depend so much what the case was. I think undoubtedly the finding of the Wassermann reaction in the positive would lead to treatment in certain cases; but if, say, an investigation over a miscellaneous number of cases for scientific purposes were being taken in hand, I do not think the discovery of the Wassermann reaction would in every case lead up to anti-syphilitic treatment. Perhaps it will in the future, when we learn more on the lines of recent knowledge. It may be so. But what I meant was that the mere fact of its coming to one's knowledge that the person had had syphilis at a certain period of his life, would not necessarily mean or has not hitherto meant the introduction of anti-syphilitic treatment. I should not like to go beyond that.

6184. With regard to the proportion of insanity due to syphilis, we have it on your papers that 2·3 per cent. of the total patients suffer from G.P.I. That proportion at any rate, may be taken as being due to syphilis?—(Dr. Coupland.) Yes; at least in part due to syphilis.

6185. That is a minimum amount?—Yes, I suppose we may.

6186. 2·3 per cent. male and female, or 3·8 per cent. among the men, and '8 per cent. among the women?—Yes.

6187. Would you regard that as very much below the minimum figure of insanity due to syphilis?—Now you put to me a question which I think it would be rather difficult for me to answer. I do not know. I think no doubt syphilis does play a part in many other forms of insanity than general paralysis; but what I should not know, and what I should not like to say is, that it is a very great part. Of course we believe that every case of general paralysis is due to it.

6188. At any rate, we may take it, among the men in 3·8 per cent. of the cases of occupants of these asylums, the disease is due to syphilis?—Yes, that you may accept.

6189. Would you double that for other forms of insanity, or can you give no approximation whatever?—No. I was trying to look up my syphilis returns, but I do not think it came to so much. (Dr. Bond.) That percentage is produced by showing general paralysis spread all over the asylum population.

6190. I am quite aware of that. I am coming to the localisation directly. I am treating the occupants of the 95 asylums as a whole, and it appears to me as a very important fact that we can say that among men 3·8 per cent. of the total insanity being G.P.I. it is undoubtedly due to syphilis?—I would prefer personally to put it that the form of insanity was due to syphilis.

6191. Will you explain how you distinguish between those two points?—That the fact that they are general paralytics is due to syphilis. I prefer personally to put it that way.

6192. But you mean if they had not had syphilis, their insanity might have taken some other form?—Yes, I mean that.

6193. You would not be prepared to admit if they had not syphilis they would not be insane?—No, I am not at all prepared, personally.

6194. That is a very important distinction. Might I ask Dr. Coupland whether he shares that view?—(Dr. Coupland.) Might I supplement the answer I gave to you just now. I think the question you put to me was this: was the 3·8 per cent. among men the amount of insanity which could be ascribed to syphilis, or how much more.

6195. Yes?—The inference is this. In the previous page you will see there was 10·3 per cent. amongst men where we had a definite history of syphilis. That leaves nearly 7 per cent. apart from the general paralytics. Therefore syphilis must play a part in many other forms of insanity even if we accept those figures.

6196. So that if I, on my own, doubled the 3·8 per cent. for G.P.I. and said probably 7 per cent. of the total insanity was due to syphilis, I should probably not be exaggerating?—No, you would not; in fact, I should say you would be underestimating. (Dr. Bond.) Yes. (Dr. Coupland.) Because at least in 10 per cent. we have got down there was a history of syphilis, and that is probably a low estimate.

6197. I am going to take that figure and nearly double the 2,200 and call it 4,000. Could you tell me how much the maintenance of an insane person costs in an asylum on an average per week?—(Dr. Bond.) The average is just over 10s. per week. That is in the county and borough asylums.

6198. Does that include housing as well as feeding?—It does not include paying off expenditure for building the asylum.

6199. Does it include pensions and staff?—Everything except to pay off the capital for building the asylum.

6200. Can you tell me how much additional that would be?—About 5s.

6201. Then are we to understand that 15s. is the total cost from all sources?—I think it is a fair estimate.

6202. It is very much lower than I should have thought. On that basis I think you will find that 4,000 patients would cost in a year about 150,000l., which, I think you will agree with me, might be very much better spent in clinics for early treatment and prevention of syphilis?—(Dr. Coupland.) Yes; that is on the assumption that, if all this syphilis were prevented, so much general paralysis would be prevented.

6203. So much general paralysis of the insane?—General paralysis of the insane, not insanity as a whole.

6204. Yes, insanity as a whole, if you like?—I believe that is a doubtful point. I believe Dr. Bond has some views on that subject.

6205. Dr. Bond has already given his views. I think I am not misstating him when I say he says that if these people had not had syphilis it is quite possible they might have had some other form of insanity?—(Dr. Bond.) I would have preferred to put it in another way, but you asked me to assent to that and I do assent to it, although, as I say, I would personally prefer to put it in another way.

6206. How would you put it yourself?—I would prefer to put it in this way: that though I entirely subscribe to the statement, no syphilis, no general paralysis, I am not at all sure that the abolition of syphilis would mean the abolition of that number of cases of mental disease coming under control; and I would go a little further and would say I think it quite possible that eventually after the abolition of syphilis had been effected, the total effect in years to come might be to increase the number of male cases which have to have asylum accommodation.

6207. Following on that opinion, I take it you would be unfriendly to any attempts to diminish the

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amount of syphilis amongst the insane?—Certainly not.

6208. I do not think that is an unfair inference?—No, I would not say that.

6209. You would run the risk of the ulterior possible consequences of the increase of insanity in other directions which would be involved in preventing syphilis?—Undoubtedly. It is our duty, if we can, to control syphilis, in my opinion.

6210. I should like to ask Dr. Coupland with regard to these proportionate figures. Going through this statement, I suppose, necessarily so, the figures have been stated as a percentage to the total inmates. I will confine myself to the general paralysis figures. It has been given as 2 per cent. of the total insane occupants. That is a proportion, is it not, between two variables. For instance, in one asylum they had a lot of chronic old cases. The proportion of G.P.I. would come out very low there, whereas in another asylum where they took in a bigger proportion of acute cases, the G.P.I. would come out high owing to that, would it not?—(Dr. Coupland.) Undoubtedly.

6211. Therefore, I think you would agree with me the better method of stating would not have been the proportion between these two variables, but to state each of them in the ratio of the population which feeds the asylum?—Quite so—undoubtedly if we could do that. (Dr. Bond.) Although they are hypothetically variables they are not so in fact. Where an asylum subserves its own county it is fixed. They have no choice in that asylum of saying "We will only take such and such a class." They have to take in the lot; therefore, although hypothetically they are variable, in fact they are not variable.

6212. On that is it not a fact that in certain boroughs for economic purposes a large number of the chronic insane are kept in workhouses and workhouse infirmaries, and not transferred to the asylums?—In a few parts of the country—not every one.

6213. That in itself would introduce a source of variation between these two factors, would it not?—Undoubtedly.

6214. Again, is it not a fact that the proportion of different ages varies in different asylums; in some asylums the average age is much higher than in other asylums?—(Dr. Coupland.) I do not know that. (Dr. Bond.) I think only where there is a selective way of housing the insane, which is very slight. If you take the majority of asylums in the Kingdom they do, speaking generally, house their own, and no more, but, as Dr. Coupland pointed out, there are a certain number of contracts in asylums, and these contracts would be simply for able-bodied people, and therefore they would, for instance, vitiate the old-age statistics of that asylum, because they would raise the middle age.

6215. Apart from the points I have now mentioned, you do not think there is any objection to stating the ratio of general paralysis to the total lunatic inhabitants of the asylum?—(Dr. Coupland.) I think it gives a very fair estimate, but in certain picked places it would be an erroneous estimate. Birmingham is a very striking instance. That has two asylums, Winson Green and Rubery Hill; Winson Green receives all the lunatics as they are certified; Rubery Hill only receives them after they become chronic. They are transferred there from Winson Green. Rubery Hill does not appear in these statistics at all, but Winson Green does, yet Winson Green, as the Chairman said, has quite a low place, although it has a higher proportion of acute cases probably than any other asylum.

6216. May I take you over a hypothetical case. We will take two towns, A and B, each with a population of 100,000. Town A has an asylum with 100 patients in it of whom 10 have G.P.I. G.P.I. forms a tenth of the total inmates of that asylum. Now in town B, also having a population of 100,000, there are 150 patients in its lunatic asylum with 15 G.P.I.'s. 15 is similarly a tenth of 150. We will proceed to compare town A with town B. Town A we will say has one-tenth of its lunatics G.P.I. Town B has the same proportion one-tenth; therefore, it does not appear that there is any more G.P.I. in town B than in town A. But if you state the two ratios of G.P.I. in terms of

population, in one town it is 10 per 100,000, in the other it is 15 per 100,000. There is a 50 per cent. excess in one town over the other. In actual fact there is an excess of 50 per cent. in one town over the other which does not appear at all in your figures?—(Dr. Coupland.) I quite admit your criticism, and I said that that was merely an approximate distribution, and we are prepared, as I said, to have a census taken. I think when that return comes in, my Lord, we will endeavour to allocate it, as Dr. Newsholme wishes, according to the population of the districts from which the cases come. We wish to be as accurate as possible.

6217. I am not wishing to make this criticism in an unfriendly manner, but it would be very awkward if at a later stage the Commission wished to use these figures, and I had to point out to them that they must not, in my opinion, be used?—Yes, they are fallacious. The whole thing bristles with fallacies.

6218. I want to make one point quite clear. Apart from the very important census you propose to take, the present figures can be made quite valuable by substituting the number per thousand of population for the percentage in all cases?—Yes, I will undertake that that shall be done, and you will have a revised table. I do not know that that will come out very different.

6219. With regard to the geographical distribution, may I make one more criticism, if you like to call it so, namely, that I think it is very important to substitute administrative counties for geographical counties, because by introducing the big towns into geographical counties you lose sight, or may lose sight, of the variations of incidence. You have given the county boroughs separately, and I think it is important to give the rest of the counties separately?—I have them separately myself—not in the table I sent in. I only sent in that table simply in order to try and make the return a little more attractive, because I had a map drawn. I could not draw a map of England of the administrative counties and leave out the boroughs, and therefore I put the boroughs into the county. That is why. It was simply for the purpose of that map that I drew it up in that form.

6220. I had exactly the same difficulty, if I may say so, in a recent map I had to draw, and I got over it in this way. I gave the administrative counties separately by shading, and I gave the towns by numbers in a circle?—I could not think of a way in getting it out, and yet I wanted the Commission to see how the distribution was in a graphic form.

6221. (Mrs. Burgwin.) Do I understand you rightly, that you could not give us the reason why Berkshire has the highest percentage of syphilitic women?—No. That rather puzzled me. It is near London; but it is not so near London, and its most important town is Reading, and there is Windsor; but I really could not venture to give an explanation of it. I noticed it was so.

6222. It would be very important if we could get the reason. Of course we, as the Commission, want to find out the reason; therefore, I feel some difficulty in this, and I wonder if you can help me. When you have lunatics certified, what is the place of residence you give them—where they last come from?—That, I believe, is the rule. Sometimes, of course, it is found out afterwards that a patient has a settlement in another place and then he is transferred from one asylum to another in order to be in the place where his settlement is.

6223. Will you tell us what determines his settlement?—I think it is three years' residence. (Dr. Bond.) The last three years' continuous residence.

6224. (Canon Horsley.) Two years' settlement, removable after one, and if you cannot get either you go to birth?—(Dr. Coupland.) It so happens, after my correspondence with the Superintendent of Brecon Asylum the other day, I had to reject two cases, because he said he could not settle them. They were found wandering in the county and nobody knew where they came from; it would not have been fair to assign them to Brecon and not to anywhere else; so they are eliminated. We have that difficulty sometimes.

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6225. (*Mrs. Burgwin.*) So that we could not get the conditions in the various counties. We cannot arrive at it quite?—No, I am afraid there will always be a margin of error. (*Dr. Bond.*) I do not think the margin of error is very large, though.

6226. It would be with regard to syphilis, would it not, because you state the ages and the most prevalent age is between 25 and 54?—For general paralysis?

6227. For G.P.I., is it not?—Yes.

6228. If you take the last three years of his residence that will bring him up, we will say, to 51 years of age. That probably had nothing to do with the syphilitic career?—I was misunderstanding you. I thought you meant with regard to finding out merely what his residence for settlement purposes was, while I now gather that you meant the residence where perhaps he contracted the disease.

6229. That is where we should get at the cause, very likely?—Our figures would not help at all on that.

6230. But if you more accurately determined his place of settlement that might help you?—I am afraid very little, because I think many patients would have several places of settlement in the gap which has gone by between the development of general paralysis and the contraction of syphilis.

6231. I will try to explain my difficulty. In towns where there is a very large number of women employed in unskilled labour and unmarried, I have an idea that syphilis prevails to a large extent amongst them. If we could get that as a fact from other places, it would help us to determine what action to take, would it not?—Quite. With regard to general paralysis, it would not be a difficult thing if it were known that a body of this kind wished the information and the body in question were extending its labours over a sufficiently long period, to ascertain from an appreciable proportion of general paralytics where they were living at the time they contracted syphilis. The great number either would not admit the fact of the existence of the syphilis or would not know; but others do and are very honest in the histories they give. An appreciable number would at any rate supply such information and might yield a valuable basis of figures. But that is an investigation that would require widespread energies carried over a long time.

6232. It might show some relation between a very low wage and this disease amongst working women if we could get something like that?—(*Dr. Coupland.*) There is another way. I was going to say that we might get at these working women. We also have a register, which I did not use, of the occupation of every patient.

6233. I thought you had?—If I had had more time before coming to give evidence, I intended to submit that; but, unfortunately, we were very pressed. Our statistical office is small and we have a great many statistics to deal with ourselves. Therefore, I am afraid much of the labour has been done personally by us and we could not cope with it all. But I am quite prepared to come again, if you wish it, with a return of the occupations of all general paralytics, if it is of value.

6234. (*Chairman.*) It would be very useful to us?—We have the information. (*Dr. Bond.*) And they are classified according to the Registrar-General's list. (*Dr. Coupland.*) Yes, there is a return for the five years, just as we have done for the other things. We only keep them for five years.

6235. (*Dr. Mott.*) The occupations would not show whether they had been in the Army or Navy when they contracted it?—They would not put ex-soldier. They would be under general labourers.

6236. That is a rather important point. I went into this question about occupation myself?—Still, with regard to the female occupations, it might be valuable. (*Dr. Bond.*) If that information is wanted, I am quite sure, from my own experience of dealing with patients in the asylums it could be obtained from them at stages of the disease when they are not too demented to give you any information; and, personally, I have not found it difficult to get information from the patients.

(*Dr. Mott.*) A great many of the women give no occupation. What do you conclude from that?

(*Canon Horsley.*) They are prostitutes, very often.

6237. (*Dr. Mott.*) Yes, a great many. That does not come into your tables. I have referred to that once. It is a very important matter, and many of them I know are prostitutes?—Female statistics are the most difficult of all.

6238. (*Mrs. Burgwin.*) I take it when you get to work on the 1st April you will have a different record for the admission of children?—(*Dr. Coupland.*) Yes.

6239. There you will have to come into contact with the parent or guardian, will you not?—Yes.

6240. I think it would be so useful if you could at the very beginning, start with getting something of the history of the parents?—Undoubtedly. (*Dr. Bond.*) That is partly arranged for. (*Dr. Coupland.*) We are puzzling our brains as to what is the best way.

6241. That is one of the difficulties you have to face; but it would be helpful in finding the cause, because I take it it is the cause you want to get at?—Yes, we quite appreciate that.

6242. (*Sir John Collie.*) What is the proportion of cases of G.P.I. caused by syphilis?—I think now, the general view is that it is 100 per cent.

6243. And locomotor ataxy?—I should think probably the same.

6244. I should like to ask you, *Dr. Bond*, if you share that view?—(*Dr. Bond.*) Yes, I do; that is to say, caused in part by syphilis and in the relationship of "without syphilis no general paralysis."

6245. (*Canon Horsley.*) With regard to the geographical distribution of figures for London, they will go up a great deal if you adopt that plan, will they not?—(*Dr. Coupland.*) If you adopt the plan suggested by *Dr. Newsholme*?

6246. Yes. I mean, if you bring back to London the cases that are now transferred into the county asylums?—If we have our census, you mean?

6247. Yes?—They will, but I do not think very many general paralytics will be amongst them. (*Dr. Bond.*) I should not think half-a-dozen. (*Dr. Coupland.*) Hardly any.

6248. I have had to visit London lunatics at Chatham, for example, and other places outside London?—Yes, there are several there.

6249. That would tend to increase the figures for London?—The total number of patients, but not general paralytics. It might actually decrease the proportion of general paralytics if we got all the patients in.

6250. But until you have geographical distribution, you do not know much of what we are talking about, do you?—No, we can only speak in a very vague way. That only gives you a sort of clue. I believe it will come out something on the same lines, but perhaps with different actual ratios. (*Dr. Bond.*) I think we could say there are many asylums it would not affect at all. (*Dr. Coupland.*) Yes, that is so. I am certain there is a great deal of truth in that map I have put in.

6251. Of course, with regard to general mortality, you bring deaths back from institutions outside the borough into the borough?—(*Dr. Bond.*) Yes.

6252. Otherwise you do not know anything about the death-rate of the place. For instance, I had to demonstrate it to Woolwich. Woolwich said it was very healthy, and I said: "You say so, because you 'send all your poor to the workhouse and infirmary 'in the next parish?'" In the same way, if we have to send them out of London, that means that the figures for London are less than they really are?—(*Dr. Coupland.*) Yes. (*Dr. Bond.*) I believe it will affect the map as a whole only very slightly, but it will markedly in one or two places.

6253. Did you include in your figures such large private asylums as Camberwell House and Peckham House?—(*Dr. Coupland.*) I selected three licensed houses, and Camberwell House and Peckham House were two of them. There was another large one, a provincial one, which I do not remember now. I selected the three largest.

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6254. With regard to these figures, again, to get the full value of them, what proportion now is put down as "cause unknown." I have not it in your figures here?—I have it added together.

6255. Roughly?—There were 16,299; that is to say, 16,300 out of 96,060.

6256. And the percentage is what?—About 16 or 17 per cent. Cause unknown and imperfect history.

6257. Roughly about 16 per cent.?—Yes.

6258. That means that the asylum doctors have been intelligent and vigorous lately in finding out causes. It used to be very much higher?—That I cannot say.

6259. The only report of yours that I have is the one for 1897, and there it gives "cause unknown" 26·3 in the case of men and 29·4 in the case of women. When it is so high as that, of course the figures for syphilis or anything else would be under the real mark?—Yes.

6260. Therefore, the apparent increase of the syphilis figures might be due simply to the fact that they had been finding out causes?—Yes, that is quite likely.

6261. And more enquiry would therefore swell the figures, both of alcoholism and syphilis as a cause?—Quite right.

6262. In many cases you know the difficulty comes not with the asylum doctor but with the fact that the relieving officers and the doctors at the workhouses do not make much inquiry?—That is so.

6263. Sometimes they cannot?—No.

6264. A person is found perfectly unconscious or a wandering lunatic is brought in. I have had to certify 200 a year myself and I know what I am talking about?—Yes.

6265. I find, if only people will take the trouble, they can get at the causes; but it has only been the business of the relieving officer to find out if they are insane or not?—No.

6266. The business of the nation is to find why they have become insane?—The business of the asylum officer ought to be to find out why they are insane and many of them are very keen to do that, but others are not so keen.

6267. To go back 10 or 15 years, they were not so keen?—No. They do not adopt any, what is called, statement of particulars which the relieving officer supplies. Our statistics do not go upon that. I remember even amongst people who ought to have known better, they have said: "What is the good of your figures, because they are only based on that "imperfect information." But that is quite an error. Our statements are based upon skilled expert information from the asylum.

6268. When a man is, in equal proportions, a drunkard and a fornicator, he owes his mental state to both, does he not?—Or his mental state might be the cause of his being so vicious.

6269. It is rather difficult to say sometimes whether you can put him down under alcohol as a cause, or syphilis as a cause?—I should think very difficult.

6270. They cannot go in both, obviously?—(Dr. Bond.) Yes, he goes in both. (Dr. Coupland.) Yes, sometimes the return is made up at least of half-a-dozen factors, or more.

6271. Taking care that the gross figure is not increased. You would not count that man twice over?—No, that man is not counted twice over.

6272. In the figures given in the report I had before, an oldish one, alcoholism was given as a cause for G.P.I. in 25 per cent. of men and 19 per cent. of women?—(Dr. Bond.) In each table we use the expression "associated factor" rather than "cause," because, as you say, it is so difficult to single out which is to be regarded as the cause.

6273. Which, on the whole, is the greater cause of insanity—alcoholism or venereal disease?—I should not like to answer that.

6274. Do you think it is six of one and half-a-dozen of the other?—In do not think, using the word insanity as a whole like that, that we have the evidence to answer that question. I should hesitate myself to give a reply to it.

6275. But you do have both down as causes?—Yes, undoubtedly.

6276. (Dr. Mott.) You will admit, Dr. Coupland, that the value of statistics depends upon the data on which they are based?—(Dr. Coupland.) Undoubtedly.

6277. Will you tell me how the information is obtained with regard to the causes of insanity at the different asylums?—Of course, I have not, personally, intimate knowledge of how the medical officers do their work. I only know there is a register kept. First of all, a patient is admitted.

6278. May I suggest one thing? In some asylums they send out a printed form, do they not?—I am afraid I cannot help you on that. I know nothing about these things. Dr. Bond does. (Dr. Bond.) That is quite correct; they do.

6279. How often do you think the printed form is filled up satisfactorily in the event of the medical officer not questioning the relatives or friends?—If the form is not filled up and supplemented by an intelligent questioning by the medical officers afterwards, a large portion of it is worthless.

6280. Absolutely worthless?—There are certain facts I do not think we need say are worthless, that certain dry-bone facts which do not involve expressions of opinion.

6281. But many of these people do not know what the meaning of venereal disease is?—If that were the basis—

6282. That is the basis of these statistics in a great measure?—I would not acquiesce in that. (Dr. Coupland.) I felt that perhaps we ought not to have been called at all, seeing it was only imperfect information; but since you wished us to appear, we had to give you the best we had.

6283. I admit it is not your fault. You have done the best with bad material. But I want the truth. I know something about your statistics, because I have had to deal with them for a very long time. When I was appointed pathologist to the London County Council at Claybury Asylum, out of 953 admissions three were put down to syphilis. The next year I induced Dr. Wolseley Lewis to investigate all the male cases that were admitted under his care and it went up to 48 in 650 admissions. I know for a fact that one of the London County Asylums not very long ago returned more cases as being due to syphilis than all the rest of the London asylums put together. I think that is within your knowledge, Dr. Bond?—(Dr. Bond.) I can quite believe it.

6284. I think you were once associated with that asylum. Perhaps you will tell us why that information is obtained there and not at the other asylums?—I think the answer is contained in what I said a little time ago in answer to the questions of the Chairman, that it is only within comparatively recent years, the last decade or 15 years, that special attention has been called to syphilis and insanity, and in particular to syphilis and general paralysis. Now attention has been called to it a certain proportion of medical officers, very rightly, sieze on to it, and they put their very best endeavours into getting real information as far as it is humanly possible to do so. But that does not apply to the whole of the medical officers.

6285. Then when you add together these statistics, is it not rather a fallacy? Is it not like putting a mouse and an elephant together?—It is fallacious, and I think Dr. Coupland all the way through has said so.

6286. Does not it tend rather to explain some of your geographical distribution?—(Dr. Coupland.) I withdraw the whole geographical distribution if you like, as we are going to have a census. I do not want to press it too hard.

6287. Let me put Northumberland. I believe Morpeth Asylum is in Northumberland, is it not?—Yes.

6288. Dr. McDowall, I believe, 12 or 14 years ago was a firm believer that the essential cause of general paralysis was syphilis, and naturally he would look for it, and that would swell the syphilis figures?—That doctrine is spreading and, no doubt, that may account

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for the fact that more syphilis has been returned; but there is always a bias in the question.

6289. Then take Cardiff; is it not a fact that there is a very excellent superintendent, Dr. Goodall, there, who does the Wassermann reaction on all his patients?—Yes.

6290. So that would explain the very high percentage of Cardiff as a seaport as compared with other seaports perhaps, like Liverpool?—Yes. Of course we have not Liverpool independent. (Dr. Bond.) That would not explain Glamorgan.

6291. Do not you think so? The population of Cardiff is more than one half of Glamorgan?—(Dr. Coupland.) We have admitted throughout that the personal equation governs it altogether—the equation of bias; because some men, of course, have a bias the wrong way and see syphilis in everything. So that we have simply balanced the whole, and have no doubt our local figures are really fallacious.

6292. Still, you would admit that the existence of a positive Wassermann reaction is scientifically accepted now as proof of the man having had syphilis; I do not say as causing his insanity?—No.

6293. With regard to the Berkshire case, there were a large number of cases there, were there not?—Yes.

6294. May they not have a superintendent there who regards syphilis as a cause of insanity?—(Dr. Bond.) Why should it be on the female side?

6295. Only on the female side?—(Dr. Coupland.) There are 5 per cent. of females.

6296. It is a small number?—The average is 2 per cent.

6297. Will you let us have the numbers of inmates and the numbers of paralytics?—361 females.

6298. That is a very small number. You cannot argue from that at all. Then with regard to the small incidence of general paralysis, I think you said it was 2·3 of the whole number?—Yes, that was so.

6299. You must remember this; that in the London county asylums, which I know something about, one-half of the 20,000 lunatics have been there over 10 years, and 5,000 have been there over 20 years. A paralytic does not remain in more than about 18 months before he dies?—Quite so.

6300. So that percentage is fallacious?—It was percentages on the admissions, was it not?

6301. No, it was on the total?—(Dr. Bond.) Is that really fallacious? I fully see the point.

6302. It conveys a fallacious impression?—Not if the same circumstance exists throughout the various counties, which it mostly does. It has a bearing on what Dr. Newsholme said just now.

6303. (Dr. Arthur Newsholme.) If I may say so, it is the same fallacy as the fallacy of the proportion between two variables, only in another form.

6304. (Dr. Mott.) You see, the death-rate in the London Asylums from 1908 to 1912 amongst paralytics was 33·3 per cent. males, and 7·9 per cent. females; the total since 1893 was 34·9 males, and 8·9 for females. Is not the death-rate equal to the admission rate every year, which it practically is? I showed a graph here not long ago, which showed the death rate was equal to the admission rate, so that you are comparing a population of paralytics that die every year with almost a fixed population, when you make up your 2·3 per cent.?—If that is a fixed population, it is not a bad thing to compare it with.

6305. Except that you are drawing a conclusion that only 2·3 lunatics are paralytics, and therefore it has only that incidence to syphilis. That is the point?—I see your point now.

6306. (Dr. Arthur Newsholme.) And you have agreed that a better way would be to state it in proportion to the outside population?—Undoubtedly. This is simply a census on a given day in the year. (Dr. Coupland.) It is the same point really as Dr. Newsholme's point.

6307. (Dr. Mott.) Then with regard to the census you are going to have, there are certain asylums where there are no female paralytics?—Yes.

6308. Who is to decide that?—We cannot send a special investigator round.

6309. Where there are very few, they do not look for them very often, at least that is my experience. I

remember some time ago, it was stated they had more female paralytics at Morningside Asylum than male paralytics?—May I say, as an old resident of Morningside Asylum, that when I was on the staff, we should have been extremely glad to find possible female paralytics and their absence was through no lack of hunting, and there has been a change. I remember my old colleagues there were extremely keen indeed. They were able men, and knew what general paralysis was, and have obtained distinction in psychiatry. I do not think they would miss them.

6310. I do not think you quite see my point. The investigator was associated with Dr. Robertson, who made experiments you remember with the diphtheroid bacillus. Who stated then that there were more female paralytics than male paralytics, which was very extraordinary, for when Dr. George Robertson came along, he did not find that to be the case. There is always the difficulty of the personal equation?—(Dr. Bond.) You must admit the personal equation in everything.

6311. The personal equation is enormous. How would you decide it was general paralysis in a doubtful case?—It is rather a hard question to put to me. I should like to hear the result of an examination—the opinion of someone who has the requisite skill—of the cerebro-spinal fluid, plus the clinical symptoms. I should not like to be bound down at all.

6312. You would admit that since we have tried the Wassermann reaction on the blood and the fluid, the diagnosis has been improved by 25 per cent.?—I know it has.

6313. In these asylums where they have not any syphilis, you do not suppose they practise the Wassermann reaction?—I do not think so. One has to consider some asylums in the light of their opportunities and on their merits. But in some of those asylums where there are no general paralytics, or very few, I believe it is genuine.

6314. You think it is genuine that there would be very few?—Yes, one day they may have one and another day none; but that they have very few, I believe to be a fact.

6315. With regard to the Wassermann reaction in different asylums, it is only done in a few relatively now?—I think we may say only in a few.

6316. You know it is done in all the London County asylums?—Yes. (Dr. Coupland.) May I ask you a question, Dr. Mott?

6317. (Dr. Mott.) Certainly?—Do you think it is advisable that we should have this census, because if it is not going to be of any value, it would be trouble for nothing?

6318. I think it would be of value, certainly?—We do not want to ask people to make this return if it is not going to be of any use.

(Dr. Mott.) I think it would be of some value, certainly.

6319. (Dr. Arthur Newsholme.) Arising out of that, as to the point made by Dr. Coupland just now. It is a most important point. If Dr. Mott suggests to us that the standard of clinical ability in some of these asylums is so relatively low that they do not know general paralysis when they look for it, then it is perfectly clear that at the end of the census, we may not be much better off than at the beginning; that is a very important point to elucidate, surely?—We do not want to go to the trouble of taking this—because it is giving trouble to the asylum authorities as well—if it is not going to be of any use.

6320. You will not agree that if the standard of clinical ability of the medical superintendents and staff of these asylums is so low, the figures will not be comparable?—Dr. Mott sets a very high standard indeed. I do not think he can have meant that, quite.

(Dr. Arthur Newsholme.) It is a very important point, Dr. Mott.

6321. (Dr. Mott.) Very?—I do not think he meant it.

6322. I have had cases of material sent to me with the assurance that it was general paralysis. But it was not. It was a case of lead paralysis, and

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they said general paralysis had been produced by lead. When I came to microscope the material, I found it was not general paralysis at all?—I think it ought to be on record how one workhouse, which received chronic cases boarded out from an asylum, certified nearly all deaths amongst those patients as due to general paralysis of the insane. When it came to one's knowledge, one could not understand why there was this heavy mortality from G.P.I., and we found that the returns had been made in ignorance.

6323. (*Sir John Collie.*) But a fact of that sort would not affect the statistics that we propose to ask you for. Of course, the statistics we are asking for would only come from the medical officers in the asylums?—Yes.

6324. You agree that statistics obtained from competent medical men who have given their lives to this particular work would, in fact, be of such value that we could take them, consider them, and act upon them?—Taking them altogether, the margin of error would be comparatively small.

(*Sir John Collie.*) There is always the personal equation, and Dr. Mott will admit that.

6325. (*Dr. Mott.*) Yes, quite.—There is, of course, always the personal equation.

6326. With regard to the effect of syphilis, you were rather doubtful whether it was not over-stated. What conditions do you, from your experience, believe to be due to syphilis, in the deaths at the asylum?—(*Dr. Bond.*) What conditions?

6327. Those found by post-mortem, besides general paralysis?—Certainly, there is a very appreciable amount of organic disease that is undoubtedly due to syphilis.

6328. Cerebral lesions, for instance?—Yes, cerebral lesions, and I believe other conditions too. We have not got altogether to the bottom of it yet. I do not think I expressed any doubt as to the effect of syphilis in that direction.

6329. And a good deal of arterial disease is due to syphilis?—A large proportion.

6330. One cause of insanity is arterial sclerosis, is it not?—Yes, undoubtedly.

6331. You seem to assume that, if it were not for general paralysis, a certain number of people would come into our asylums and remain there a very long time, from some other form of insanity?—I think it is possible.

6332. Why do you think that?—You are landing me into rather a long story, but I will do my best to cut it short. It is only an expression of a very immature opinion, but it is based upon a certain amount of fact. It is this. If we take an asylum where there is the highest number of general paralytics, and we know that that disease affects the male sex something like six times as much as the female, other things being equal, the male first admissions at that asylum ought to be, generally speaking, in excess of the female, more particularly if, as Dr. Newsholme would I am sure advise, they were divided into quinquennial or decennial age periods, and a careful selection made for comparison only of those periods of life which are liable to be affected by general paralysis. With that supposition, I have for some little time been setting myself to work at figures, and I find that it is not borne out. On the contrary, even in asylums which give the biggest number of general paralytics, the number of male first admissions as compared with the female is almost identical, and it has made us ponder very much. We did not intend to allude to this matter in our evidence, because what we are investigating is not at all complete yet. As the question has been put, I may say I do not think it is at all certain that if we have the power of controlling syphilis, and therefore of saying, "No more general paralysis," that means necessarily that those people who would have had general paralysis would not otherwise be insane. On the contrary, I believe it is possible that the male asylum population may rise to somewhat equal to the female, other things being equal. But that is merely an opinion, of course.

6333. Then you do not agree with me that general paralysis is an organic brain disease?—I am bound to.

6334. If your theory be true, how is it that there are five times as many male paralytics as there are female paralytics, when the female admissions are greater than the male admissions?—I do not admit that the female admissions are greater than the male.

6335. But they are; there are more female admissions?—It would be unwise at the moment to enter into this. I believe if you compare male and female admissions at the age periods of general paralysis, they are about equal in first attack cases.

6336. I am speaking of the total population. I mean to say that the females are more numerous than the males in the asylums, are they not?—Undoubtedly, the total population, but not the admissions.

6337. And there are other causes of insanity than syphilis?—I think it has another interpretation. I believe general paralysis may be regarded as wiping out a great portion of the males; but the matter requires more consideration.

6338. You know I have taken a great deal of trouble for five years in the study of heredity?—Yes, and we have been very much interested in it.

6339. I have a system of cards dealing with 3,500 relatives?—Yes.

6340. I was struck with the result that general paralysis does not seem to show heredity hardly at all—not much more than you would find in the average population?—Not more than in the average population. Is that again, after dividing the cases of general paralysis into age periods and comparing the insane heredity in them with the insane heredity in similar age periods of the total first-attack admissions—because I then found a contrary result—although, before I used this method, I used to think that general paralysis had a very low heredity.

6341. It is generally admitted that heredity plays a relatively small part in the production of general paralysis in comparison with other forms of insanity?—That is so. I am beginning to feel that the subject wants re-examination, with care that comparisons are only made in corresponding age-periods with my old opinion on that.

(*Dr. Mott.*) I think very likely an ardent temperament, and indulgence in alcohol, and other things, might come in, but I do not think insanity does to any extent.

6342. (*Mrs. Scharlieb.*) I think I understood from you that there were about 6,620 cases of congenital mental deficiency, which you refer to on page 4 of your statement?—(*Dr. Coupland.*) Yes.

6343. Syphilis was present in 47·3 per cent. of the cases of idiocy and imbecility with a history of congenital syphilis, and in only 0·6 per cent. of the cases of acquired syphilis?—Yes. The point was that the congenital imbeciles amounted to 47·3 per cent. of the cases of congenital syphilis; but there were hardly any cases of acquired syphilis. It was simply that congenital idiocy was generally associated with congenital syphilis, and one would have expected it; that was all. That is, the imbecile cases were 48 per cent. of the whole number. That was the point. I am afraid I ought to have put it more clearly.

6344. However, you say that the principal factor in congenital mental deficiency is probably syphilis in 52 per cent. In that case does it not strengthen our hands, in endeavouring to get rid of syphilis, that all these children should be born in that way in consequence of a preventible disease?—Undoubtedly. I think that is rather a strong point, that syphilis is a principal factor in producing certain conditions of insanity.

6345. Is it your experience that epilepsy is more frequent in those children who have been infected with congenital syphilis than in other children?—I am afraid I cannot answer that question. (*Dr. Bond.*) If I interpret the question aright I should say, yes.

6346. That epilepsy is more frequent amongst the congenital mental defectives that are also infected by syphilis?—Yes.

6347. Syphilis is the additional factor?—Yes, congenital syphilis.

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6348. You are limiting it to congenital syphilis entirely?—Yes.

6349. (*Mrs. Creighton.*) What is the cause of G.P.I. being so much more common amongst men than women?—It must be the distribution of syphilis.

6350. You mean that one should infer from that that there was more syphilis amongst men than women?—No, not exactly that. It surely must be that many men contract syphilis from one centre. A woman infected can in that way give rise to any number of male cases, and that, I venture to think, explains the reason why there are so many more male general paralytics than there are female.

6351. Therefore it simply is another way of stating that a greater number of individuals amongst the men are infected by syphilis than women?—I think that is it.

6352. Would it be fair to infer, from the higher rate of syphilis amongst the private lunatic patients than amongst pauper lunatics, that there is more syphilis amongst the better classes than amongst the poorer?—(*Dr. Coupland.*) I do not think I can say that. (*Dr. Bond.*) I should not like to say that at all.

6353. But apparently that difference runs right through?—(*Dr. Coupland.*) It does run right through.

6354. How do you explain that fact?—(*Dr. Bond.*) If I remember the figures rightly, is it not a good deal this: that you can get your information from the males a good deal more easily than from the females?

6355. That is not the question?—(*Dr. Coupland.*) The fact that you can get the information from the more intelligent or better educated than the others may be a reason.

6356. But you think the women are more reticent?—I think they might be more reticent.

6357. On the other hand, one would imagine that the more educated people would be more reticent?—There has always been that distinction. I do not like to say more than that. (*Dr. Bond.*) I should just like to clear up what I said just now. I think it is very difficult to get from the female private insane any information about syphilis. It is a subject that is often not touched on.

6358. That has nothing to do with my question. I was not mentioning females. The total number you give amongst the private patients is larger than amongst the pauper patients?—Yes.

(*Mrs. Creighton.*) That is the point, and I want an explanation of it.

(*Dr. Arthur Newsholme.*) Might it not be due to the fact that among the private female patients a larger proportion of the chronic cases are kept at home than is the case amongst the pauper lunatics?

(*Mrs. Creighton.*) That would make your case still worse, because we have more amongst the private patients.

(*Dr. Arthur Newsholme.*) These statistics have been based upon the ratio between two factors, and if you had more chronic demented kept at home among the wealthy people than amongst the poor it would—

(*Mrs. Creighton.*) —not diminish the number?

6359. (*Dr. Arthur Newsholme.*) It would cause an increase in the number of syphilitics among the well-to-do?—(*Dr. Bond.*) It would cause an apparent increase.

6360. (*Mrs. Creighton.*) It all points to our difficulty in drawing conclusions from these figures?—(*Dr. Bond.*) Or from any figures at all.

6361. (*Mr. Lane to Dr. Bond.*) You said that a note was taken of the incidence of gonorrhœa or the previous occurrence of gonorrhœa in patients taken into the asylum?—Yes.

6362. Do you ever find any association between insanity and gonorrhœa, that gonorrhœa might be a cause of insanity?—In my past experience I should not like to say that I have not had one or two instances in which gonorrhœal fever has produced insanity in form of an exhaustion psychosis, but very very rarely indeed.

6363. I suppose you get cases of insanity due to menstrual disorders and to disease of the ovaries, the Fallopian tubes, and so on?—It is a very difficult problem indeed. Every year more knowledge is

accumulating about these internal ductless glands, but it would be very difficult, I think, at the moment to say that any particular group of cases was due either to ovarian disorder or to disease of any of these internal glands.

6364. Are *post-mortem* examinations made in all cases of death in asylums?—Not all; it varies from 50 per cent. upwards. (*Dr. Coupland.*) On an average it is quite 70 per cent. (*Dr. Bond.*) Yes, over 70 per cent.

6365. Do you get cases in asylums in which active syphilis is present?—A few—quite an appreciable number, but few relatively. By active, you mean recent, not active late symptoms?

6366. I mean obvious signs of recent syphilis, say, secondary or early tertiary symptoms?—Yes.

6367. But you think the treatment of those cases is not very efficiently carried out?—No; I think it is quite efficiently carried out.

6368. But, according to old lights?—Yes, according to old lights; not the salvarsan treatment.

6369. Then in very few asylums, I suppose, salvarsan has been tried?—I do not think in many; at least, I have not heard of it. It is fairly extensively done. I think I have read in medical papers of an account of its use in one or more of the Glasgow asylums.

6370. In regard to the junior medical officers in asylums, what particular qualities are required in them?—It entirely depends upon the asylum.

6371. It depends upon the medical superintendent a great deal, I suppose?—Yes, very largely upon what his aims are.

6372. I think very often the social and athletic sides are given the preference in appointing junior medical officers?—I should not like to say very often; there was a time when in some places that was considered very much, but not now. I believe there are still places where that is considered much too highly, but not in many places, I am happy to think. I think my colleague will agree with me that those places are in a very small minority now. (*Dr. Coupland.*) Yes. (*Dr. Bond.*) As a matter of fact, it is exceedingly hard to get medical men at the present moment.

6373. (*Sir Aimeric FitzRoy.*) Are you of opinion that the large number of cases amongst women are due to employment in factories?—(*Dr. Coupland.*) I shall be able to answer that question better when I have gone further into it. But I think it may be. Take Lancashire, for instance.

6374. I see you give the male cases for Lancashire and other industrial counties in group 2; but I do not notice any figures in regard to females?—The female cases are fairly high in Lancashire.

6375. You do not mention Staffordshire at all?—In Staffordshire the women are below the average.

6376. But surely there is a large number of admissions from the Potteries?—One would have thought so. The five towns were said to be notorious at one time for their immorality.

6377. May not the high ratio in the case of general paralysis to the number of admissions be due to the fact of the stress of life plus the syphilitic taint in the production of that disease?—Yes. The stress of life undoubtedly is a factor.

6378. That renders the taint more active in a great many cases, I suppose?—That may be so. But I think it is due to syphilis, and that is quite sufficient to explain it. It does not require any other factor.

6379. But may not other conditions bring out the syphilitic taint in that particular form?—(*Dr. Bond.*) I think undoubtedly; in cases I have examined, I have found, for example, trauma or head injury.

6380. (*Sir Kenelm Digby.*) I think you give Northumberland and Glamorgan as the two worst?—(*Dr. Coupland.*) They are rather bad.

6381. I do not know whether my recollection is right, but I think the criminal statistics published by the Home Office—I do not know whether it is the same now, but it used to be some years ago—gave the crime in different counties, and of those in which alcohol was most consumed, the very blackest of all were Northumberland and Glamorgan?—I can confirm that, because they were the two counties in which crime due to drunkenness most prevailed. Curiously

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enough, they were not the highest in the insanity rate; Northumberland is rather low in the total amount of of its insane, although it has a very high rate of general paralysis.

6382. Do you attach any importance to that as connecting the two—as one of the causes?—I do not know. You see, if one believes that syphilis alone is adequate to produce general paralysis, one would not think so. But I have no doubt we shall find in North-

umberland that a great many of these cases were associated with alcoholism too.

6383. It is rather curious?—It is.

6384. (*Chairman.*) We are very much obliged to you for your evidence. We shall expect to hear from you in reference to the proposed census, and also as regards the two asylums in which you think you can have Wassermann tests done?—Yes, and I will get the various occupations of the general paralytics.

The witness withdrew.

EIGHTEENTH DAY.

Friday, 13th February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

Sir KENELM E. DIGBY, G.C.B., C.B.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Sir THOMAS BARLOW, Bart., K.C.V.O., called and examined.

6385. (*Chairman.*) You are President of the Royal College of Physicians?—Yes, that is so.

6386. Do you hold any other honorary post of that kind at the present time?—Not at present.

6387. We asked the Royal College of Physicians to send us a representative or representatives to give evidence on this question. May we take it that your evidence will represent generally the views of the Royal College of Physicians?—I do not think I can make the Royal College responsible for all that I say.

6388. We have been very much impressed by the very large prevalence of congenital syphilis and its influence upon the birth-rate. If you would kindly give us the benefit of your great experience in dealing with children on that point as to the hindrance to the birth-rate, we shall be very much obliged?—Yes, I will do the best I can. With respect to this first section, congenital syphilis, as a hindrance to the birth-rate, it will be well known to the members of the Commission that the mode of syphilitic infection in married life is not by any manner of means a simple one. We assume for this inquiry that we are dealing with infection conveyed from the man to the woman. Of course, there are obvious cases where the man is suffering from local manifestations of this disease in the early stage where he communicates it, and where the woman suffers sometimes in a very virulent way. But that is not the problem we generally have to deal with. At all events, in a large proportion of cases the man has undergone treatment and is not suffering from any early local manifestations of the disease at the time of his marriage. It is certainly true that in a large number of cases the wife does not show any of the early signs of acquired syphilis. The first indication of her infection is very often the occurrence of an early miscarriage. She may have several early miscarriages. Those, of course, in themselves would be no evidence, because early miscarriage, as everybody knows, can occur from a great many different causes; but by-and-bye she has a miscarriage, say, at the sixth or seventh month, and that is a very suggestive incident. She may have some more of those miscarriages at, say, the sixth or seventh month, and then probably she brings forth a live child. That live child,

whether it is full-time or not, may be a very poor creature. It has upon it the indications of a very serious form of rash called pemphigus, and the child is generally atrophic and ill-formed, and of very low vitality. Now, a few of these cases have been examined pathologically, and it is very important to bear in mind that in some of them most extensive indications of syphilis have been found; great swellings (gummata) in the liver and in some other of the organs of the body. Since we have had the examinations, and since the discovery of the organism specially characteristic of syphilis (the spirochæte) we have found that in a child such as I have described the interior of the body is swarming with spirochætes. It is a more virulent source for cultivating that organism than any acquired case could be.

6389. That might be in the child though the spirochæte was not present in either of the parents?—I would rather say not always easy to discover in the parents. I think that is the safer way to put it.

6390. But easily discovered in the child?—Yes, easily discovered in the child.

6391. Now to carry on this family tree, as I may call it, a child such as I have described generally dies, and, we will say, the mother conceives again. She may have another such child or she may later bring forth a child that goes to full term. That child may to all outward seeming be a healthy child; the only indication at birth, or within the first few days of life that there is anything wrong with it is perhaps what the nurse would call a little stuffy cold, which may be anything. But when about four to six weeks old, the child develops a rash, which is absolutely characteristic, and cannot be mistaken for anything else; and other signs come out that I need not particularise. Now in this stage it is most striking how amenable the child is to the influence of certain treatment—mercurial treatment we will say. In a very short time it looks a different child, and may throw both doctors and parents entirely off their guard. In accordance with the prejudice that exists against the continued use of mercury, that child, after the outward manifestations have subsided, may be left untreated. It is interesting to mention, and I think it is relevant, that the mother,

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[Continued.]

we will assume, herself at this stage shows no signs of syphilis, and when the syphilitic child is put to her breast she does not develop any signs of syphilis from her own baby. If that child is put to somebody else's breast or is kissed, it may at once convey a very virulent form of syphilis.

6392. The mother is immune from infection by her own child?—Yes.

6393. Is there any explanation of that?—It is very difficult to explain it. It is of course in some ways analogous to vaccination, and it is assumed that the early infection was a very mild infection. But that is not adequate. I do not think we have got a really adequate explanation.

6394. But those are the facts?—Those are the facts. Continuing the course of the little baby's life, we will suppose that the outward signs of this disease are apparently checked in a most striking manner, but it is not true to say that in all cases it gets well. In some cases the nutrition continues to be lowered, and in fact becomes very markedly lowered, and the child becomes very pallid and develops an enlarged spleen. In other cases the child may be fairly healthy for several years, but if it comes under the doctor's care when between five to eight years of age, then it is found to be somewhat undergrown for its years, and it is at once recognised by a marked depression in the bridge of the nose, and also by peculiar scars round its mouth.

6395. Those come on at a later stage?—Those are manifest at that age. Those are the definite results of the first trouble which was apparently cured by mercurial treatment. But they are indications which are very important, I think, in educating people as to the depth of the disease having been very much greater and more profound than it might have been assumed to be. At this period there are four important indications apt to be present. The first is shown in the permanent teeth. There is a characteristic change and deforming of the upper and median incisors. There is a change in the eyes. There is a form of inflammation of the cornea (the front of the eye), first one eye and then the other eye, which is very obstinate and may last for many months, and is very apt to relapse; but it is generally curable in the long run with perhaps some little alteration of the media. Then in the deeper structures of the eye it is found there are patches of wasting in the choroid at the back of the eye which come very insidiously without any marked symptoms, but which damage the eyesight to a certain extent. Still further, this child from five to eight years old begins to show a chronic form of deafness which is slowly progressive, and may go on to stone deafness. Inflammation of the fronts of the eyes it is true may, after many months, recover, but the damage to the eyesight from the diseased choroid at the back of the eye never recovers, and in 90 per cent. at least of the cases the deafness is not amenable to treatment, and is generally progressive in a bad way. Now the life of those children at school, especially amongst the humbler classes, is most unpromising, and many of them become perfectly useless members of society. But this is not all, for in some cases this special form of ear and eye trouble may come on even when they have passed the age of 20. At that age, when the patient, it may be presumed, has begun to earn his living, there is a most serious hindrance to efficiency. At various periods before the one I have referred to, there are other very formidable nervous conditions which may supervene. Now this is a point which is not widely recognised, but it is a very important one, and that is that syphilitic infants are notably liable to convulsions. Long before the teething period these children are specially liable to convulsions which are very often made light of in regard to infant life; but in these syphilitic children they are not at all unimportant, because the convulsions may inaugurate a very subtle and chronic form of inflammation of the membranes of the brain, and this inflammation of the membranes of the brain, this form of meningitis, may be fatal at any period of infancy or childhood, but when non-fatal such special form of inflammation

may be the first of a long series of very important incidents in the nervous system of the child. It may be followed by disease of the arteries of the brain, and by deposits forming in the brain which are called gummata, and by a chronic thickening of the membranes and of the brain substance itself, and further by extension to the spinal marrow and its membranes; in short, you may get the same group of lesions of the nervous system in children and young people who are affected with congenital syphilis as you get in adults who suffer from acquired syphilis. All these variations are more or less associated with mental deterioration from the very beginning; and in addition to this, which makes the parallel with the adult forms quite remarkably complete, at this period or later we may get what is called juvenile general paralysis. Now the features of this form of insanity, for it is insanity, have been very carefully worked out by Dr. Mott, and they are really strictly analogous, making allowances for differences of development, to the general paralysis of the insane as found in adults, which we are all practically agreed now is almost invariably the late remote consequence of acquired syphilis. The bones, the nose, the palate, the tongue, and the internal organs are also subject in congenital syphilis to chronic and relapsing disease resembling, with certain peculiarities of their own, what is found in adults. My impression from having seen a great deal of the later results of syphilis both in children and in adults is, that the generalisation and wide dissemination of lesions is greater in children than in adults, and the recrudescence of these troubles, with intervals of partial improvement is very striking but very pitiful, for the arrested development and mental degeneration from various causes are so considerable that one is often tempted to ask whether such lives are worth preserving or not. Now, it is remarkable that physicians who are concerned with idiot asylums have in past years rather discounted the influence of congenital syphilis as an important cause of idiocy; but it is noted that many syphilitic imbeciles are kept at home, remaining a terrible drag on their parents, but they are not so actively troublesome as to secure admission into asylums. But I would further draw attention to the fact that since the Wassermann test for syphilis has been studied, it would seem from certain researches that a considerable number of idiots in the asylums give positive reaction to this test, even when they do not show other indubitable signs of syphilis. Further researches may show that the old opinion that congenital syphilis was rather a negligible quantity as a factor in producing idiocy will have to be carefully reconsidered. Now with respect to the maternal health, it is important to know that although the mother of syphilitic children may, as I have already emphasised, show practically nothing in the way of early manifestations, yet after having borne a certain number of syphilitic children she may herself become subject to what is called a tertiary or late lesion. Following families up in which congenital syphilis has occurred, at an adult hospital with which I was connected, I have seen a most pitiable example of this in which deep ulcerations of the skin and thickenings of the bone, and fatal damage to the brain occurred to a woman whose childbearing history was exactly what I have set forth in the beginning of this communication. I have seen cases where the mother, who began as a thoroughly healthy woman herself, and bore three successive children, or had abortions, then stillborn children, and then children apparently healthy at first, who developed afterwards signs of syphilis, and then further on I have traced those children up to manhood, and in some cases they have developed this terrible deafness and failure of eyesight so that they became useless. I have seen such a mother after all this trouble herself develop signs of incurable syphilitic brain disease and die under my observation. Still later the father came to me showing late manifestations of syphilis; the point being the exceptionally far-reaching character of the virus. Now to sum up and emphasise the first thesis, the congenital syphilitic virus has exceedingly malicious, if I may call it so, effects upon the birth-rate, causing

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conception to fail in fruition; then infants do not survive more than two or three days; then infants are born who show varying degrees of infection and at a later period, after moderate health, have apparently a stage of manifestations that lead to absolute inefficiency and sooner or later lead to their death. My first statement is as to congenital syphilis being a hindrance to the birth-rate. The second one I have embodied in this paragraph as a hindrance to healthy development. If you like to ask me any questions before I go on to No. 3, I will answer them. I have also really trenched on No. 3 in what I have said, I am afraid.

6396. Yes, you have.—Would you like to ask me any further questions on these points before I come to No. 4.

6397. There are a few questions I would like to put to you. The main cause of the decrease in birth-rate due to congenital syphilis is the large number of miscarriages?—That is one cause, no doubt; that is the cause of the failure of a good many.

6398. And in addition to that there is the utter breakdown in various ways of the children of such a marriage, is there not?—Yes, but there is a proviso which I ought to have mentioned, that apparently quite apart from medicine, the virus of syphilis does seem in some cases mercifully to exhaust itself, so that the woman who has borne these children may, if she goes on bearing long enough, eventually bear a healthy child or sometimes more than one healthy child.

6399. Is syphilis recognised as a cause of prevention of conception?—Not in the same way as gonorrhœa is.

6400. Then the real danger is that the disease, though it may produce those terrible effects that you have told us of, may be latent in the female?—Precisely, and in the male also.

6401. In such a case of latent syphilis, would the Wassermann test discover it in the parents?—It might, indeed probably would.

6402. It is not certain, is it?—I should not like to give an absolute answer to that question. There is strong reason to suspect, as I have said in the latter part of this communication—in fact I think you are shut up to that conclusion, that you may have the spirochæte incapsuled or nested in some part of the body, just, as your Lordship knows perfectly well, you may have a kind of nest of malarial organisms, being so to speak latent, boxed up somewhere, and that from various conditions, perhaps intercurrent illness or perhaps some lowering of the general nutrition, something leads to the escape of the spirochætes that have been shut off for a time. I cannot say that that is actually proved, but there is a strong presumption that that is the way in which we must explain this phenomenon.

6403. What would you call a sufficient standard of safety for marriage. Should no one marry if he gives a positive test?—I do not think he ought to marry if he gives a positive test.

6404. No one?—No one.

6405. If he does, all these terrible things that you have spoken of may happen?—You have no guarantee that they would not happen.

6406. I gather from what you have told us that the congenital symptoms in children are very easily recognised?—Yes, very easily recognised in the early stages.

6407. And anyone accustomed to diagnose these diseases would see them without applying the Wassermann test or the microscopic test to children?—Certainly.

6408. And every practitioner ought certainly to be able to recognise in children the infallible signs of congenital syphilis?—I should say so, but I am speaking, of course, of the early manifestations. As to the later forms you could not make such a statement. In the later forms, just as in acquired syphilis, it is often a matter of inference.

6409. But in any case in which a child was kept under observation by the same practitioner for a long period, if he noticed these early symptoms you would expect something of the kind you told us about to

develop in after years, and he would know what it was when it came?—He ought to be able to do so if he has studied his work.

6410. You spoke of mercurial treatment for children at the early stages. Has that treatment the effect of staving off these later results?—That is a very difficult question to answer absolutely. It is perfectly certain that you may treat a child adequately for long periods with mercury, and you may rebuke, so to speak, the early manifestations in a most striking and dramatic manner, and do everything you think you possibly could do, even keeping the child under treatment for a whole year, and yet some of these manifestations may come out.

6411. Then congenital syphilis is really more difficult to exterminate or to control than acquired syphilis in the man or woman?—I certainly would not like to say that. Of course, you have a parallel thing happening again and again. In acquired syphilis, a man may be treated thoroughly in the early stages, and for a considerable time, and may for years be free from any manifestation of it, and yet may develop locomotor ataxy or general paralysis of the insane.

6412. Has salvarsan or neo-salvarsan been tried in the case of young children?—I cannot answer that question from personal experience. It has been tried in congenital syphilis, but I do not think on any large scale. I think the introduction of neo-salvarsan would be rather an anxious matter into the veins of very young children. It is a thing one would hesitate about.

6413. I suppose it is not possible for you to give us any idea of the extent of this congenital syphilis taint?—Congenital syphilis at all?

6414. Yes?—The number of cases, the proportion, in the Children's Hospital, in the out-patient's department, of congenital syphilis was, roughly speaking, about 2 per cent.

6415. Two per cent. of what?—Of the cases being brought for various complaints.

6416. It is to the institutions which deal with children that we must look to get information on that point, I suppose, mainly?—Yes; it will give you the prevalence, of course, so far as the class of society that that hospital will tap. My impression would be that was a fair sort of proportion amongst the humbler classes such as those who would come for hospital treatment.

6417. Have you preserved any records of family trees which illustrate the dangers you have spoken of?—I have a number of them scattered through notes extending over years. I daresay I could put my hands on some of them if they are desired.

(Chairman.) It would be well for the other members of the Commission to examine on those first three points only. I do not want to stray beyond them at present.

6418. (Sir Kenelm Digby.) Is the evidence which you have been giving us, and the general conclusions you draw, drawn mainly from your experience of institutional treatment or from your private patients?—Both but mostly from institutional treatment.

6419. Of course we see them on a larger scale in institutions than in any private practice. One wants to get some idea of the difference between the different classes of society to some extent?—Yes, that is very important. Of course one has seen a certain number of cases in children of well-to-do people, and some very distressing ones too. The better nourishment, the general nutrition, does make a difference no doubt—good food and so forth makes a difference in the matter, but it is not such a very great difference as might be imagined. I have seen some very terrible cases among the children of the well-to-do.

6420. On the whole, I suppose we may say generally that the evil is sufficiently widespread and sufficiently grave and serious to justify exceptional preventive measures; I mean more than as regards other diseases.

(Chairman.) Those questions will come later.

(Sir Kenelm Digby.) Yes.

6421. (Sir Almeric FitzRoy.) May I ask you if any conjecture has been made as to what would be the

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effect on the birth-rate, supposing the syphilitic taint were removed?—If you could eliminate it?

6422. Yes?—That is a very difficult thing to say; the most difficult thing is to get statistics on this matter. I am afraid it is almost a fruitless quest at present.

6423. Do congenital syphilitics ever survive the conditions you have so graphically described, and so convey the infection to the third generation?—That is a very interesting question. There is some divergence of statement about it in the French and English schools. I have seen myself, in one case most notably, the child of a woman who bore upon her the signs of congenital syphilis, and I can truly affirm that her child to outward seeming was not a syphilitic child; and that was the opinion of Sir Jonathan Hutchinson, who had more experience than anybody. I think I may say. But it is only fair to say that the French School, led by Mons. Fournier, hold that the children of people subject to congenital syphilis show some indications of what they call dystrophy, that is, defective development. I think myself that is a very vague statement, and as far as my knowledge goes I should say it was not borne out.

6424. (*Mr. Lane.*) Then would you say that the children of syphilitic parents, the subjects of congenital syphilis, were rendered immune?—No, I should not; certainly not; they can acquire syphilis.

6425. They can certainly contract syphilis in the ordinary manner, can they not?—Quite so.

6426. And I think Sir Jonathan Hutchinson has recorded a certain number of cases in which it was transmitted to the third generation. Then you have spoken about the damage done by congenital syphilis. You would agree that congenital syphilis tends to the development of tuberculosis?—It is a very good soil. I have made post-mortems on cases where there was just exactly what you are saying.

6427. So that is an additional danger to life?—Undoubtedly.

6428. You have seen a number of cases of hereditary syphilis. What was the latest time you saw the manifestations occur?—Of these late manifestations?

6429. Yes?—I have seen them occur between the ages of 20 and 30.

6430. And never having shown any signs at all before?—I could not say that absolutely.

6431. I think there are cases recorded in which after careful observation that has been so?—I think there are.

6432. Then as to the possibilities of infection from the mother, it does not necessarily follow because the mother is syphilitic that the child is?—No. It has been pointed out by Sir William Jenner, a good many years ago, that after a number of syphilitic children the mother may bear apparently healthy children; and that has been verified.

6433. But I mean this might be in the case of the first child, and the mother might be syphilitic, and the child might be born perfectly healthy?—That I have no knowledge of.

6434. It would be according to the date at which the mother became infected during the period of gestation. Could you give any percentages of the results of pregnancy, in the case of syphilitic parents, as to the proportion of infected children or prematurely born children?—I am afraid not.

6435. There were figures taken in years gone by, but presumably they have improved by now?—I should think so.

6436. The proportion of mortality was said to be 55 per cent. at one time. Then you have seen also some children, the subjects of hereditary syphilis, born in apparently perfect health, perfect specimens of children?—The children of people who are subject to congenital syphilis?

6437. Yes?—You say perfectly healthy; but I would not. I would say at all events without obvious evidence of syphilis.

6438. As regards treatment, you have told us that children are very amenable to mercury; but you

alluded to intra-venous injections into children of salvarsan?—Yes.

6439. I do not think that has been attempted, or, if so, only on a very small scale?—Yes, very small only. There has been something done I believe, but I am not familiar with the results.

6440. The intramuscular injections of course have been carried out in very small doses?—Yes, of course that has been carried out.

6441. Then you mention what is known professionally as Colles' Law. Is this presumed to be invariable?—It has been contested, I believe, but I have never seen any reason to doubt it myself.

(*Mr. Lane.*) I think we have already had explained what Colles' Law was.

(*Chairman.*) Yes.

6442. (*Mr. Lane.*) Then you were talking about deafness. At what age does the deafness usually occur?—The cases I have seen have generally been somewhere between 5 and 8; but, of course, in some cases it occurs previous to and sometimes much later than that.

6443. And very much earlier?—I have not seen it much earlier. Those I have seen have been chiefly at that age or later.

6444. We have had the evidence of one witness who said that the damage to the organs of hearing takes place before birth or during the first years of life, and that the deafness is permanent?—I think Sir Jonathan Hutchinson's cases were generally about the age I have spoken of, coming on generally about the same time as the eye changes, or either before or after, but radiating round the time of the second dentition.

6445. You were talking about the later effects of syphilis on the health of a wife who has been infected by her husband. But she need not necessarily show any outward manifestations of syphilis?—No. I was only saying that the fact that she has borne all these children and that for a long time her health was remarkably good, was no guarantee that she will not develop some of these later tertiary manifestations of syphilis.

6446. But in many instances she would simply show it by a general failure of health, without any signs of syphilis?—It has been my luck to see very definite changes come on. The most notable case to which I referred was a woman who was remarkably well during the period of many years that I knew her, and then suddenly she showed bone changes, and then eye changes, and then, as I say, developed gumma in the brain, of which she died.

6447. Such a case as that is not very common?—There are cases of the same character referred to in Sir Jonathan Hutchinson's writings.

6448. Then you were talking about syphilis preventing conception, but not in the same way as gonorrhœa. Gonorrhœa would prevent it by obstruction?—It would prevent it probably by setting up inflammation of the tubes and damage to the ovaries. I do not say that that might not occur in syphilis, but I think the usual way in which it interferes with birth is by leading to an abortion.

6449. Then as regards safety for marriage. You would rather insist upon the Wassermann test?—That is so in the present state of knowledge.

6450. And you would make it compulsory for any one contemplating marriage to produce a certificate?—No; I think that opens a very large question. I am not prepared to say how that should be administered, but I should say the ideal thing is that any man who has had syphilis ought to undergo a Wassermann test before he gets married.

6451. (*Chairman.*) You think that every doctor should advise a man contemplating marriage to undergo that test before he marries?—Yes, I should as at present advised. I should prefer to put it in that way as a matter of injunction. As to whether it should be made a legal thing is a larger question, and I am not competent to answer that.

6452. (*Mr. Lane.*) You know it has been tried in one of the States of America?—I understand it has.

6453. And that it was not very successful?—I do not know the details.

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6454. (*Mrs. Creighton.*) You spoke about a child being able to infect others who kissed it?—Yes.

6455. How long does that last in a child's life?—I cannot answer that question positively. I should assume that it would only last during the time that there were sores about its mouth or on the skin—active sores.

6456. That would be the source of infection in the child?—Yes. Of course, these children get these very particularly infective sores—what you call mucous tubercles—in other parts of the body sometimes.

6457. The hands of the nurse might be infected?—Yes, the hands of the nurse might be infected.

6458. Have you seen cases where, if a mother had shown signs of syphilis by having an abortion, say, and then has been treated for syphilis, that has produced any good effect on the child?—Yes, very great effect. There cannot be any two opinions about that. If a woman such as we have considered has mercurial treatment carefully administered for long periods, there is no doubt about the fact that sometimes a child is born which does not show any signs, so far as we have watched them.

6459. But in the ordinary case where a woman shows, from having abortions like that, that she is syphilitic, does the doctor tell her what is the matter with her?—I think that varies. I think every case has to be treated on its merits. In some cases it is wiser to keep her under observation and treat her without telling her anything more about it. I should say in a very large number of cases that would be the wise and tactful thing to do.

6460. You mean from the point of view of not producing differences between her and her husband?—Yes, precisely.

6461. But under such circumstances would the doctor feel it his duty to speak to the husband?—Yes, I think he should undoubtedly.

6462. Do you think he often does?—I think in a goodly number of cases he does.

6463. And if the mother asked very pointedly what was wrong with her, do you think it would be professional etiquette to keep it from her?—It is very difficult to say. I think those questions of casuistry you cannot give a general rule about. I think every case should be judged on its merits; that is my strong conviction.

6464. I was asking rather whether it was a question of medical etiquette or not?—I think medical etiquette would be to act in the way which the medical man himself thought was the most effective thing to do, and, at the same time, the least liable to give trouble and distress.

(*Mrs. Creighton.*) I have heard people say that the present condition of the law of libel makes it difficult for the medical man under those circumstances. Is that the case?

(*Chairman.*) I do not think that this question arises out of what Sir Thomas Barlow said.

6465. (*Mrs. Creighton.*) From your account just now of the serious effects upon children, you seemed to be speaking as if the effects on the children might be very serious, whereas the syphilis in the parent had been very slight?—Yes.

6466. A man might have had a very slight attack, easily apparently cured, and yet have passed on these most serious conditions to the children?—Decidedly.

6467. (*Mrs. Scharlieb.*) If a woman has two or more miscarriages without anything very obvious to account for them, is it your opinion that we should advise the Wassermann test?—Two or more early miscarriages?

6468. Yes?—I think I should insist on that. I think you will agree with me that those early miscarriages are useful evidence when taken in conjunction with other things.

6469. Yes?—But you know better than I do there are other causes that might induce it. I think one ought not to make too much of that. But the miscarriages that occur in the sixth, seventh, or eighth month are much more crucial than the early ones.

6470. Quite so; but it happens that I have had a patient lately who had five miscarriages quite early,

and it appeared to me that I ought to advise the Wassermann test, because in itself it is only a little annoyance and it is not dangerous?—Quite so; it would always be instructive.

6471. Then is it your opinion that a great many of these cases we used to regard as tubercular meningitis were syphilitic?—I think some of the chronic ones were.

6472. (*Dr. Mott.*) You said there was no adequate explanation of the so-called Colles' law. Do you not think the fact that all these may give a positive Wassermann reaction shows that the organism is still in their bodies?—Yes, it may be so; they may be, as I said, nested.

6473. If they were nested they might give a positive reaction, you said?—Yes.

6474. The observations which have been made in Germany by the Wassermann reaction show that all these women give a positive reaction?—That is an important observation of which I was ignorant.

6475. There was one question I wanted to ask you, not quite the same as Mrs. Creighton's, but somewhat of the same nature. It is this: If a mother brought an elder child to you suffering, we will say, with syphilitic inflammation of the cornea, or nerve deafness, and you asked her, "Have you any other children?" and she told you she had a large family of younger children, would not you advise that those children should be tested?—Decidedly.

6476. With a view to treatment?—Yes, certainly I should.

6477. I take it you quite agree with the statement of the late Sir Jonathan Hutchinson that some of the most noteworthy of our therapeutic triumphs are obtained when mercury is judiciously used for infants suffering from congenital syphilis?—Yes.

6478. Then with regard to convulsions, I was very glad to hear you emphasise convulsions, because in the study of a large number of family histories of congenital syphilitics which I have made I observed myself—of course these people could not tell me what the children died of; they often mentioned meningitis or water on the brain, but more frequently convulsions—the convulsions really were an expression of organic brain disease, I take it?—Yes.

6479. I think in your original paper published in the 28th volume of the Pathological Society's transactions, you described cases of syphilis in which the children died of convulsions?—Quite so.

6480. And later, in an article in the Dictionary of Psychology, in conjunction with Dr. Bury you quoted 90 cases, and in half of those cases you observed that there were signs of mental degeneration; is that so?—That is so.

6481. And that you thought rather under estimated than over estimated?—Yes, decidedly.

6482. You did not mention, but I have no doubt you have seen cases, of optic-atrophy as a result of congenital syphilis?—Yes, very marked indeed.

6483. And the juvenile form of tabes and locomotor ataxy?—Yes.

6484. I have seen both of those. The fact of the low percentage of cases in idiot asylums with signs of congenital syphilis may be due to the fact that all the signs of congenital syphilis were not observed?—Yes.

6485. Choroido-retinitis is a very frequent sign?—Yes, very.

6486. I have observed that myself, and it requires skilful examination and observation?—Yes.

6487. Then with regard to the Wassermann test, you said that you thought no one giving a positive Wassermann test should marry?—I think so.

6488. I presume then that if treatment removed the positive reaction and you obtained a negative reaction, you would give permission to marry?—I should not object to it, if a considerable time had elapsed.

6489. That would depend on the time after infection whatever the Wassermann test might give?—Yes.

6490. There is a very large number of people walking about apparently in perfect health, and with

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healthy families, who would give a positive Wassermann reaction?—We want some more information about that, I think.

6491. A very large number?—Yes; of course, the disease lasts a long time.

6492. I think after all we must be guided by the time after infection, must not we?—Perhaps so.

6493. Then with regard to the 2 per cent. of congenital syphilis attending the out-patient department of the hospital; I suppose that would vary according to the class from which the patients came?—Perhaps it would. Of course, in a place like the Great Ormond Street Hospital you do not get a great many of the very lowest population.

6494. If it were not for the fact that syphilis is so fatal in the pre-natal condition and early infancy, there would be an appalling number of cases of serious nervous and brain diseases which would exist in the population?—Yes, there would.

6495. You mentioned cases of the so-called parasymphilitic diseases which may occur almost at any time in life as the result of congenital syphilis?—Quite so.

6496. You know that practically one would think that every case of general paralysis means that the spirochæte is in the brain?—Quite so.

6497. Therefore the spirochæte can exist in the body up to any age practically?—Quite so.

6498. From congenital syphilis?—Quite so.

6499. Then why should it not be transmitted to the third generation?—I do not know, I am sure. I think that is a thing that must be more investigated. I am only speaking of instances.

6500. I myself have seen a case which, I think, was transmitted to the third generation. I go with the French school on that point; because both Levaditi and Bab have discovered the spirochæte in the ovaries and even in the ova of adult women suffering from congenital syphilis?—Yes.

(Canon Horsley.) I have no questions.

6501. (Rev. J. Scott Lidgett.) May I ask whether you have formed any impression as a result of your experience as to any variation in the incidence of these diseases in different classes of society?—I suppose that one sees more of them in the humbler classes undoubtedly; but there are various qualifications that must be borne in mind. In the first place, if you lower the nutrition of a child, say that the mother's breast milk fails for any reason, and there is not enough food, undoubtedly the manifestations of the disease will be more marked, and the child will be brought for treatment. On the other hand, in a child of well-to-do parents, the early signs are dealt with pretty quickly, they have money at their disposal, and so on. Those things have to be borne in mind; but I should say that I have seen very serious manifestations of congenital syphilis, and especially its effects on the nervous system, in some of the children of the very well-to-do. I suppose your question rather referred to the relative proportion of the disease and not to its manifestations?

6502. Yes. For example, taking the very poor and the artisan who represents a so much higher class of labour?—You get a tremendous lot amongst the artisan class. I am very reluctant to say much about it, because one is so apt to mix up analogies from other cases; but my impression is you get syphilis, just like you get alcoholism, amongst the well-to-do artisan class.

6503. Would you say when you pass to the lower middle class that there is any difference?—I think the lower middle class are much better; I think the shop-keeper class are amongst the most moral people in the country.

6504. Would you suggest that as one gets again higher up there is a difference?—Yes, I should; then it comes again. But I am very reluctant to go beyond actual knowledge.

(Rev. J. Scott Lidgett.) I asked as to your impressions?—I did not wish to take you too far.

6505. (Sir John Colvie.) You spoke of relapses in infantile syphilis. I suppose you would agree it is impossible to treat these cases without the use of mercury?—Mercury seems to me to be by far the best. The immediate amelioration is very striking. But the

absolute eradication of the disease is enormously difficult. I have a further section on that.

6506. If a child has syphilis, the probability is that the mother has had it?—Yes, in some form.

6507. May the fact that the mother cannot be infected be explained by the well-known impossibility of infecting the infected?—Yes, quite.

6508. It is practically the explanation of Colles' law?—Quite so. If you tried to infect people suffering from general paralysis of the insane from a sore, it does not produce it—it does not come off; it is not the same thing.

6509. So the explanation of Colles' law is, that if the mother has got it she cannot take it again?—She does not have the primary manifestations again.

6510. Yes, but she has got the spirochætes in her blood?—Yes.

6511. One point about the 2 per cent. of those cases at Great Ormond Street. You say that represents 2 per cent. of the cases in which syphilitic manifestations have been diagnosed?—Yes, that is so.

6512. It does not represent the comparatively large number of latent cases of syphilis that may be coming up later?—No, quite right.

6513. In other children which you are treating for other diseases you still have the disease latent?—No; it does not carry you very far, any more than any of the statistics do.

6514. I thought the number was so small that you must have referred only to those cases you had really treated for the definite manifestations, and that it did not give us a really good idea of the amount of latent syphilis amongst those children. That is my point?—The way in which the number was arrived at, I might just mention. Generally in an out-patient clinique you have a book in which the physician puts down, as each case comes before him, very brief diagnoses. That number would, I think, represent about the number that came before him in that way, and it would include the cases that were obviously showing late manifestations as well as early ones.

6515. (Dr. Arthur Newsholme.) Can you state what the increase in the birth rate would be likely to be if syphilis were abolished?—I wish I could. I am afraid I do not quite see how to arrive at that.

6516. Could you go any further than that in regard to still births. Probably you may know that at the present time communities representing 60 per cent. of the population in this country have the Notification of Births Act in force?—Yes.

6517. Under the Notification of Births Act, still births after the 28th week have to be notified?—Yes.

6518. Those still-births in these towns average about three to every 100 live births?—Yes.

6519. Could you give us any idea as to what proportion of those 3 per cent. would be due to syphilis?—This is only an impression, but my impression is that the vast majority of them are.

6520. That is a very important statement. The majority of the 3 per cent. of still births after the 28th week are in your opinion due probably to syphilis?—I should start with that conviction; but I am very anxious that it should not be taken in any more sense than as an impression.

9521. Then if that be so, some preventive action might be taken on the very strength of those notifications?—Preventive action so as to put a mother under treatment, do you mean?

6522. Yes?—I think it might.

6523. These notifications, as you are aware, are made to the medical officer of health?—Yes.

6524. Could you indicate to us any way in which such preventive action might be taken in regard to syphilis without injuring the family life or doing damage to anybody? That, I gather, comes later?—Yes.

(Chairman.) I will deal with that later.

Dr. Arthur Newsholme.) That is all, then.

6525. (Chairman.) In these cases you have given us such useful evidence upon, you spoke of the husband suffering from syphilis in a latent stage rather than in a stage he would perhaps notice?—Yes.

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6526. Does that apply to the general evidence you have given at the present time?—I think it does; at least it is that particular group I am dealing with. I am dealing with the cases where a man gets married and has had syphilis and has been treated, and at the time when he marries he has no local manifestations which would be regarded as infective. Of course, it has been held that the late or tertiary manifestations, as they are called, are not infective. I think that needs to be rather more investigated.

6527. But if the husband had the disease in an active state, or if he acquired it afresh after marriage, I suppose then the wife would certainly be infected?—Almost certainly.

6528. And would the results on the children be just the same as if the father had it in the latent stage, or would they be worse?—It is getting on rather dangerous ground. One does not dogmatise; but I should think the probability is that an early conception would almost certainly lead to miscarriage, and that if a child were born, it would be suffering from a virulent form of the disease.

6529. The results would be worse and more obvious?—They might be.

6530. Because the mother would have it in a more active stage herself?—Precisely; but I think that needs very careful guarding. I am not provided with statistics that would enable me to answer it fully.

6531. From the answer that you gave to Dr. Mott, I gather you think it is the large number of deaths of these congenital syphilitics which save the population from becoming more and more idiotic and mentally defective?—Yes, I think it is.

6532. If it were not for that, we should have far more lunatics?—I think you would.

6533. The next item on your list is "Illustrations of its latency." Will you proceed with that, please?—Yes. In the previous paragraphs I have indicated that there may be periods, sometimes of many years' duration, between the early and late manifestations of syphilis, and we are led to suspect that the spirochætes may become nested in various parts of the body, and from some cause or other discharged into the circulation after long intervals. Intercurrent febrile illness will sometimes revive manifestations of congenital syphilis, but many recrudescences cannot be explained in that way. It is important to realise how very widespread the damage may be, and that the causes that are inscrutable to us may light it up the virus again in many different situations. The lessons of pathological examination on this point of latency are most astounding. Everybody who has followed the cases of both children and parents, and has seen the temporary improvements under medical treatment, and has then, it may be years after, an opportunity of making post-mortem examinations, is astounded to find how widespread the disease may be. There are a lot of damaged organs which have been enough to carry on the nutrition of the body after a fashion, and have not shown anything very active in the way of symptoms, but they are damaged organs, and it is this latency of both the morbid product and the latency of the symptoms that needs I think to be emphasised.

6534. Then we may take it even now, with all our modern science, we can hardly be said to know how far the ramifications of the effect of syphilis extend?—Precisely. The long periods of a parent's health are such a fool's paradise to both children and grown-up people, and there may not be definite indications of damage and yet the presumption is that the individual, whether a child or an adult, is a very poor creature, so to speak, for actual efficiency in consequence of the widespread damage that there may be, that does not show itself in ordinary ways. That is my point.

6535. It is probable that there is no disease that is quite so insidious?—Quite so. That is all, I think, on No. 4.

6536. Then we come to the question of treatment in the early manifestations?—With respect to the effect of the treatment of congenital syphilis, it is important to know that the early manifestations, for example, on the skin, are exceedingly amenable, and this very amenability is apt to put the physician and

the parents off their guard. In the later relapses there is often some response to suitable treatment, but the results of post-mortem examinations show a far wider and deeper damage than has often been suspected from the symptoms manifested.

6537. Is it too much to assume that these manifestations of the disease can ever be quite wholly cured?—That is the bearing of my remark. There is nothing more striking than the benefit that a little child who has a rash upon it, the typical characteristic rash may improve, and the way in which that seems to clear off, and the child is better in every possible way and looks quite jolly and charming; and yet, as I have said, when it comes before you between five and eight years of age, you see the little thing's nose has the bridge depressed, the remains of the catarrh that it had in the nose, which damaged the mucous membrane of the nose, and damaged the growth and development of the bones. You see deep lines of scars around the mouth, which are the result of the second trouble, which was much deeper than it appeared to be. These are, so to speak, the analogues of what one finds in all the other parts of the body.

6538. Now we come to "Reasons for its being so difficult to eradicate"?—The reasons for the great difficulty of the eradication of the virus probably depends on the fact which bacteriological investigation has demonstrated, namely, that the spirochæte seems to be very much more abundant in the infantile form of the disease than in the acquired form. The internal organs, especially the liver and the spleen, show the organism in the greatest luxuriance. I speak with hesitation on those points of later investigation, but I think I am right in stating that one of these virulent cases of a child born with pemphigus, as it is called, the vesicular rash on the body and its great syphilitic deposits in the liver and other different organs, from the laboratory point of view is a most interesting case, because the spirochæte can be obtained in the greatest abundance.

6539. Is it the case that in these children suffering from congenital syphilis the spirochæte gets into the cerebro-spinal fluid at a late period?—At a late period.

6540. I mean a comparatively late period?—I think it may get in at any period. The views I have formed about the late lesions in the nervous system are that very often the original trouble dated back from the very beginning, and that just at the time when the skin shows these lesions very often the deeper structures are affected, because in the early stages of syphilis—we see it very much in the acquired form—there are various distressing pains in various parts of the body, in severe cases, that are very very suggestive of the deeper structures having affections which undergo afterwards a considerable amelioration; but it is quite on the cards that these structures that are damaged are the foci of subsequent recrudescence.

6541. When the spirochæte has got into the cerebro-spinal fluid, or into the brain, has mercury any effect?—It is very difficult to give an absolute answer to that question. I think it is our duty to try it.

6542. You would use it anyhow?—Yes.

6543. Now we come to the "importance of maintaining continuous supervision of the parents and families"?—This is what my observations led up to. The importance of maintaining continuous supervision of both parents and families is abundantly obvious from the foregoing remarks. There is no doubt that the administration of mercury during pregnancy to a woman who has already had abortions and still-born children, is frequently followed by the birth of a full-time child, and happily sometimes the virus seems to be neutralised. Further, as I have already stated, there is always a risk of the mother showing late manifestations, tertiary lesions, as they are called, in spite of her health having been free from obvious damage in the earlier period. It is possible that there may be a fresh activity and a fresh virulence when either mother or father show late manifestations, although it has been the custom to regard the late manifestations as non-infective. But I submit that

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this view may require re-investigation. Again, it is possible that if we prolonged our course of treatment both for parent and children, and gave repeated courses in successive years, we might have more success in warding off late relapses than has hitherto been the case. The use of neo-salvarsan will probably give us a chance of suddenly arresting any marked outburst. I consider that the ideal method of treatment and prophylaxis would be, given a syphilitic infant, both parents should be under medical supervision and medical inspection at frequent intervals, and other children of the family subsequently born should be inspected also at frequent intervals, and that this surveillance should continue for several years. If I may just add to that one point in respect to what Dr. Newsholme shadowed forth, I cannot but believe that a compulsory post-mortem examination of the still births at the period at which Dr. Newsholme has mentioned would be an enormous addition to our knowledge, would give us a clue for treatment which nothing else would give, because I have a strong suspicion from post-mortems that I have made, that in an enormous number of still births not only would evidence of syphilis be found but, as I said just now, it would be absolutely conclusive. I am quite confident that a great many of them would be found to have what we call syphilitic gummata in the viscera, and if that were proved to be so, it would be of immeasurable importance in giving us sound ground on which to proceed with further treatment. That very thing might save the lives of a good many subsequent children, and might be the means of safeguarding the health of the mother who has had the still birth.

6544. I gather you think that if a doctor discovers any of those symptoms in any member of the family it is very important that he should inquire into the family history generally?—Yes.

6545. And, if he is allowed to do so, keep the family under observation?—Yes; certainly he should see every child and see the father, and get a lien, so to speak, on every member of the family.

6546. You have not given us any information about gonorrhœa. Is there anything you would like to tell us about that?—Of course, one has had certain experiences concerning it. It does sometimes come into the children's pathology, and in rather a curious way. Of course, there is a form of leucorrhœal discharge that little girls have sometimes that may be quite innocent, rather protracted and difficult to cure, but is occasionally gonorrhœal in its origin.

6547. Congenitally gonorrhœal?—No. I have seen most dire results from that, abdominal trouble, peritonitis, just like you get in adults, sometimes of fatal peritonitis. Then, of course, I have also seen inflammation of the eyes. Of course, it is well recognised in ophthalmia neonatorum. I have seen cases of that kind, one of the definite causes of preventable blindness. I have also seen in rare cases affection of the joints in connection with gonorrhœa in little children. Of course, none of these were congenital.

6548. Gonorrhœa is not strictly congenital?—No, it is not congenital.

6549. But you recognise it as being a very important disease, and very dangerous. It is very serious in its effect upon women generally?—In regard to children, perhaps the most important effect is ophthalmia of the new born, which, of course, they contract from their own mothers probably; and that is the most serious of the relationships, as far as children are concerned.

6550. Have you formed any idea whether there is any less prevalence of gonorrhœa than there used to be?—It is a very difficult thing to answer. I think there is a general improvement in the morality of the population. I am quite positive there is in certain classes of society. Things that were looked upon as venal, and as a matter of course, are now looked upon as disgraceful. There is a much higher sense of obligation in regard to them; but it is very difficult to estimate by statistics.

6551. Ought that higher standard of morality in time to produce less prevalence of these diseases?—

Yes, I think so; and I think it is very hopeful for any educational crusade that arises out of the work of this Commission. I think the public mind is in a state of most promising preparedness to receive admonition, and to recognise the moral obligation of these things being dealt with. It is quite different from what it used to be.

6552. Apart from the general educative effect on the public which our report may have, do you think any special education or instruction on these subjects is desirable?—Yes, very desirable.

6553. At what age would you give that instruction?—I should not begin it at school age. It differs according to the class of society. In the well-to-do classes I think it would be quite enough to start it perhaps in the public schools. I am not sure about the sixth forms of the public schools, but certainly in the university period. But amongst the humbler classes I think one ought to remember with our population, with the overcrowded conditions of sleeping-rooms and so forth, that the young people get a premature acquaintance with these subjects which is positively appalling, and I think we have been a good deal too straitlaced with regard to the humbler people in talking to them about this. Now, directly young people are sent to work, whatever the work may be, I think they ought to have instruction on this matter. I do not know that I can add anything to that, except my strong conviction that in town populations and in seaport towns, and in connection with other places where young people of 15 and so forth are employed, I think it is imperative that they should have instruction.

6554. And do you think that the work of instruction should be carried out by private agencies, or under the supervision of the Education Department of the State?—I am willing to have it come from all sources if only the teachers are properly enlightened.

6555. Do you think the teachers should be professional men, or that the ordinary teachers should be specially trained?—I think it is very important that a good many professional men should be employed, because the danger is of people who have not enough knowledge and are only half educated, and whose education is only directed to this one thing becoming sensational and extravagant and unwise.

6556. But the doctor would preserve a proper sense of proportion?—I am quite sure that the doctor should always be in it. I believe there are many medical men who feel so strongly about this that they would willingly join any crusade on the subject, and help to teach others what they should do and what they should teach.

6557. One of our difficulties is to arrive at any idea of the prevalence of venereal diseases amongst the upper classes. We get more or less reliable information as to the classes which attend institutions; but this is a question of considerable difficulty. Could you make any suggestions which would be helpful to us to obtain this information?—I should like to think it over; but on the spur of the moment I think there are a goodly number of high-class family practitioners who could give you information if it were properly safeguarded, and I think there are a number of doctors engaged in what is called city practice who only see the fathers of families, so to speak. There are a great many men who go to the city who prefer not to employ their ordinary family practitioners for themselves, and prefer to see a medical man in the city. I think those would be very useful. Then of course there are a number of eminent surgeons especially, who make a study of venereal diseases. They see a great many military men and men in all ranks of society, and they could give very valuable information. The most valuable information would come from professional consultants connected with the general hospitals, and connected with the Lock Hospital, who have large clientèles of this kind. Those I should put first of all. Then I should take, as I say, good family practitioners, and I should take gentlemen who are engaged in men's practice in the cities. Those are professional sources. Of course, you could get an

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enormous amount of information from the army and the navy men.

6558. There is no difficulty about that; we can get it?—But you are speaking specially of the well-to-do classes?

6559. The well-to-do classes of the civil population?—You might get a certain amount of information from men in university towns and where there are educational institutions.

6560. You think we should follow two lines; first take selections of doctors who are known to treat these diseases on a large scale, and the other spread over a particular area, and ask all the practitioners in it?—Yes; of course as to the men who have to do with poor practice, it is very difficult for them to keep notes, and I think it would be hopeless to get statistics from them.

6561. But do you think if forms were sent to them asking them to keep a record for a period of six months or something of that sort, they would be able to do that?—In regard to the humbler classes in connection with insurance?

6562. Yes?—To be quite candid, I do not think it would be worth doing.

6563. But with the practitioners who deal with the upper classes, you think there would be no reluctance on their part to do this for us?—I think if you were to take precautions to prevent not only anything like identification of the patients, but of the doctors; I should be rather chary even about the names of towns. Of course the seaport towns are enormously valuable for the humbler classes again, and a certain number of the well-to-do.

6564. Have you given any thought to the question of compulsory notification for the purposes of registration of deaths; that is to say, that deaths due to syphilis should be always registered as such where the fact has been shown?—A medical man with any nous can, without stating that the case was one of syphilis, so frame the death certificate that the registrar can read between the lines and can send for further details which would enable him to enter the case as one of syphilis. It is a very delicate business, both in syphilis and in alcoholism, for the medical man to state broadly that it was syphilis or alcoholism; in fact I may as well say that it is almost impossible to baldly state that. If a man has had any post-mortem experience and has really studied his work scientifically and realises the value of true notification and true registration, as I say, he can do it in a way that will tell its own tale.

6565. Would you make it legally compulsory on the certifying officer to give such a hint as the Registrar-General could not fail to recognise?—I am very reluctant to make any legal rule. I have much more confidence in trying to enlighten the people, and trying to show them the value of information, than in laying the thing down by law.

6566. Then I suppose you would not be in favour of notification in that form in which notification is made to the health authority whenever the disease is diagnosed in anybody?—I should be most reluctant to do that. I think in this country it is against the genius of the English people. I think there is much more hope from general enlightenment and education and appealing to the consciences of folks and disseminating widespread knowledge about the conditions, and so forth. That is the direction, I confess, that it seems to me we ought to aim for.

6567. But still the general trend of your evidence is to show how terribly dangerous these people are. Is it right that they should be able to go about without any check?—Some of the dangers of contagion from these cases, I think, have been overstated. It is not the dangers of contagion that we fear; it is the dangers of transmission. Contagion, I am positive, among many of the enthusiastic and well-meaning people has been very much over-estimated. I think the danger which a man should face is the danger of transmitting this to his offspring, and the trouble his wife will have in having one of these poor sickly creatures always on her hands all through her married life, and the misery that it brings; and the more one

appeals to these motives I think the better chance one has.

6568. Then, of course, there is the case of the unmarried man, who, having this disease, can distribute it?—Yes, there is.

6569. You are entirely opposed to any obligation of a legal kind?—I am very very chary about it.

6570. Even if it was kept as confidential as possible?—I can only say that it seems to me the process of enlightenment and education, and appeal to the higher motives of people, I think, is in the long run the way to proceed.

6571. But you do agree that the most important thing is to bring the patient to the qualified doctor at the earliest possible period?—Yes, and to give the very very greatest facilities for early treatment. I think what we practically have to do is to make facilities for effective and complete treatment in the early stages, and to improve those to the very utmost.

6572. And you would not make it obligatory on a person in whom the disease has been discovered to go on with the treatment?—I hardly feel that I am competent to advise on that matter. I have not enough experience. I do know this, that all the evidence that comes from foreign towns as well as England is that legal compulsion in regard to this disease seems to break down most terribly.

6573. Have you any knowledge of the large amount of unqualified practice in these diseases which is going on?—Personally I have not, but I am very strongly of opinion that in anything you do in regard to legal compulsion about notification you run a very great danger of putting more people into the hands of the unqualified practitioner; I mean people of no moral fibre.

6574. Have you ever thought of any means of restraining these unqualified practitioners from dealing with diseases of this kind?—I think that is a matter that should fall within the purview of the General Medical Council.

6575. Would you go so far as to say that the Government should confer a licence upon every practitioner to enable him to practise, as is done in Germany?—I do not quite follow you.

6576. Do you think that a Government licence ought to be necessary to allow anyone to work in this country?—Yes, I do. I think that we ought to have a State examination and a State licence. I am very strongly of that opinion. A good many of us would like to see one entry to the profession. In fact some of us think that we have examining bodies which could do that already most efficiently under the direction of the Government.

6577. But if a Government licence was necessary, then you could make it penal for anyone to practise who had not that licence?—Of course, registration is necessary now. In that matter every man, of course, in order to be allowed to practise, has to be a registered medical practitioner; he can be registered with a great many different diplomas and degrees, and if he practises without being registered he renders himself liable under certain conditions to legal consequences. He can of course give medicine and so forth, but he cannot give a certificate of death or of birth.

6578. Then there is nothing really to prevent him from treating diseases of all kinds according to his own sweet will?—I am afraid there is not, if people desire it; but he gets into trouble if a patient dies.

6579. Quite so. That is the only chance you have of getting hold of him?—I do not think it is quite accurate to say that. His life can be made pretty miserable. He can be worried pretty considerably.

6580. In many cases I assume he finds his profession very lucrative, does he not, especially in dealing with these secret diseases?—I have not knowledge enough to answer your question about this kind of practitioners.

6581. Having regard to the modern knowledge of the treatment and diagnosis of these diseases, do you think that our standard of medical education is sufficiently high?—Yes, I think it is. A medical student now has a very hard time of it in his five years, because the study of bacteriology and various new

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methods of inquiry has made it a very laborious thing. It is quite true of a doctor at the end of his five years that there are a great many things about which he requires more practical knowledge; but he has a very good basis upon which that can be built, and medical science is always advancing.

6582. Do you think that young doctors who now take up practice in the country have sufficient knowledge to be able to recognise and diagnose these diseases at once and know what to do with them?—I think that the State aid could do an enormous amount of good in facilitating say the application of the Wassermann test and giving all possible adjuncts to the advancement of knowledge in that way. I think there already exists the machinery upon which that could be grafted and I think that is the way in which it should be done.

6583. You think at least that every practitioner should know how to take the material for making these tests?—Yes, I think so; there is very little difficulty in that.

6584. I have only one other question. In your vast experience have you found the effect of alcoholism is potent at all in regard to these diseases?—Yes, very striking. It is most remarkable how alcoholism, so to speak, brings the latent manifestations into relief and makes the treatment of them much more refractory; in fact, Professor Ehrlich told me there is no doubt that some of the bad cases of damage done by salvarsan have been in alcoholic subjects, and Professor Ehrlich explicitly besought those who are carrying out the treatment on no consideration to use it on an alcoholic person. That is an illustration of it. But of course the way in which alcoholism shows up syphilitic lesions is one of the commonplaces of pathology. Everybody knows it makes syphilis more damaging and more refractory in every way from first to last. Again, it is very striking how, if you stop a man's alcohol when you are treating him for syphilis and stop it absolutely, you often have so much more satisfactory results. There cannot be two opinions about that.

6585. And the effect of alcohol is to render a man not only more liable to contract the disease, but to make it very much more difficult to cure him when he has got it?—Very. In regard to the point you have mentioned, it has always to be remembered that from first to last the influence of alcohol with regard to these venereal diseases is most disastrous. It is when young men and men of various ages are under the influence of alcohol that they are often led into it, and they contract these things. At one time I was physician to the Fever Hospital. Sometimes young men were brought from their business houses suffering from various infective diseases, measles and scarlet fever, and so forth, and some of these young men had gonorrhœa at the same time, for which they were being treated. Again and again they have besought the medical officer on no account to give them any alcohol, knowing from their own personal experience how much worse it made them in regard to these local troubles. That suggests one illustration which the men themselves found out. But of course, as I say, from the very outset right on to the bitter end, the maleficent effect of alcohol on all venereal disease is remarkable.

6586. Then the increasing sobriety among the population of all classes is another factor that may help in the diminution of these diseases?—Yes, I think so. I think in any campaign that ought to be very strongly emphasised.

(Chairman.) Thank you very much.

6587. (Dr. Arthur Newsholme.) You were laying stress upon the importance of compulsory examination of stillborn children?—Yes.

6588. That would necessitate the provision of facilities for that purpose by various authorities?—Yes it would.

6589. And you would attach much importance, I take it, to the provision of these facilities by county councils and county borough councils?—Yes, I should I think your idea of the engagement of the county councils and borough councils on this subject is one of the most hopeful things in the campaign. I think if you can arouse the local patriotism on these sub-

jects there is the most promising field. I look indeed, to the local patriotism and any local enactments with much more confidence than to anything proceeding from the centres.

6590. But you describe the examination as compulsory?—Yes.

6591. And does that mean you would not allow a stillborn infant to be buried until such an examination had been made?—I should go that far.

6592. Would you regard it as desirable that the result of that examination should be communicated to someone else?—Yes, indeed I should.

6593. To the parent, presumably?—Yes.

6594. And if it were a syphilitic still-birth, that information should be given to the responsible parent?—Yes, I should go that far, certainly.

6595. Which parent?—That is a matter of personal tact, I should think. I should be in favour of communicating it to the father, certainly.

6596. Then would you go further than that, and encourage the local authorities to provide similar laboratories for examining the products of conception at an earlier date?—Yes, indeed I should. I submitted the name of Dr. Routh to this Commission on this very point. Dr. Routh is much better informed than I am, and he is prepared to deal with that matter fully.

6597. But you would regard such compulsory examination of the products of conception as very desirable public health work?—Yes. I go so far as to say it is imperative.

6598. You have laid great stress on the importance of getting the childbearing history of each mother who has stillborn infants?—Yes.

6599. At an earlier stage I began to ask you what you would do when you got the information about the still births, assuming you found out they were syphilitic?—I should always tell the father everything about it. But I think, if I may say so, about this sort of business, it is very important to do it with very great discretion and great kindness. If it is done with kindness and discretion by medical men, who know what a difficult job it is, who know what troubles may arise, if you get good medical men to undertake it, the probability is it will be done in a way that will help matters forward. If this is going to be done in any way by people like medical sanitary inspectors and officials, there will be dreadful mischief result from it—family troubles, bitterness, and resentment, and so forth. My view has been that in all these instances the medical man who has had to do with men and women, and who is not engaged only in pathological inquiries or in official sanitation, is the right person, that in any suggestions and enactments the widest scope must be given so as to allow of tact and kindness and gentleness to be brought in.

6600. (Chairman.) You do think it is a moral obligation to try to get the information?—Yes, I do.

6601. You are strong on that opinion?—Yes.

6602. (Dr. Arthur Newsholme.) You are aware that more than 50 per cent. of the births in this country are not attended by doctors?—Quite so.

6603. With regard to this remainder, some official, I am afraid, must take it on?—Yes, that is true. I am afraid that you will think I am sentimental about it.

6604. I agree with you that that official should exercise the utmost possible tact, and even then you may get into trouble?—Yes.

6605. With regard to the notification, you are opposed, I think, to any form of notification of venereal disease?—I do not like to say that, but I do realise the enormous difficulties, and I think in this subject, if I may say so, the secret of making any real wide influence is to carry people with you in it. I think even at the risk of waiting a bit and being a bit longer time over it, we must carry people with us.

6606. Would you regard it as equally objectionable to notify certain forms of congenital syphilis, say snuffles or interstitial keratitis?—Notify it in your death certificates, do you mean?

6607. No, I am now speaking of when the patient gets it, notify it to the medical officer of health?—I think it is getting on dangerous ground.

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6608. Quite so. One question about hospital treatment. You would regard it as very desirable that general hospitals should take up more fully than they do now the treatment of these diseases?—Yes, I do. I think it is most imperative.

6609. Do you regard it as calamitous that at the present time general hospitals commonly take up the attitude of refusing a great many of these patients?—Yes, I do.

6610. You think it is extremely desirable that pressure should be brought to bear on them to induce them to alter their attitude?—Yes, I think so; I do really. There is room for everybody. I think the Lock Hospital has not had half the support it ought to have had. If I may say so, I think it is a splendid institution, and it has wonderful potentialities of far greater extension and of doing a lot more good in its different departments.

6611. Then, if you were Chancellor of the Exchequer, would you be inclined to disburse the country's money to aid the treatment of syphilis and other venereal diseases in these general hospitals?—Yes, I should. I should want to guard it very carefully as to how it went. I should look with the greatest encouragement of all on increasing the methods of pathological investigation.

6612. That you would make your first subject of subsidisation?—Yes, undoubtedly, because it seems to me that we should give an accurate and widespread knowledge, and with proper care and with proper precautions, let the public have a very extensive knowledge of these diseases. The question is now tabled, so to speak. It is before the public, and the thing is to give an accurate knowledge, and let the people know, apart from exaggeration and so on, and I think that is the first thing the Government should do.

6613. Apart from such subsidisation of pathological diagnosis, do you think it is likely that the local authorities in this country will readily do what ought to be done in that direction?—It is a large subject, and I speak with very great diffidence; but I would like to see the present arrangement of hospitals, as voluntary hospitals, maintained, and I would like to see subsidies either from the central government or from the municipal bodies made for pathological investigation and treatment besides. I should not object to the municipal bodies having some representation in the management of the hospitals and the allocation of the money, but I should look with the greatest dislike upon any municipalisation of hospitals generally. I should feel that the best chances of all these hospitals doing good and carrying the people with them, and maintaining the spirit of kindness and of real charity, would rest with the present methods of hospitals controlled by a voluntary committee.

6614. (Rev. J. Scott Lidgett.) May I ask you a few questions upon the educational suggestions you made just now. I think you said that in your judgment all boys and girls should have instruction on the dangers to which they may be exposed before going to work?—Yes, or when they go to work.

6615. You fixed the age, I think, at 15?—I do not like to give an age, but somewhere about that. I think it is better to put it on the ground of the working age, whatever it is.

6616. You are aware, of course, that a great many children, the majority, leave before they are 15?—Yes, they do, and it might even be necessary to do something. I think it would be a matter for arrangement how much it should be.

6617. Would you provide for such instruction to be given through the head teachers of the school?—I think, to do the thing properly, you must have the doctors in it.

6618. But would you bring the doctors into direct contact with the children or would you use the doctors to instruct the teachers?—Yes, that might be the way.

6619. It has been suggested to me that the presence of a doctor going round the schools to give this information would, perhaps, be accompanied by unwholesome excitement about it. What is your opinion about

that—that it would come more naturally and with greater respect for the differing conditions of different pupils if it came through the teacher?—I have not enough experience about the methods of teaching, but my feeling has been that if you want to have a subject attuned to a humble capacity you want the very best knowledge, and that you must have. To write good manuals or a good handbook—even a small handbook—it seems to me to need a master of his subject, and, I think, to teach children on this very delicate subject, that a doctor who knows the thing *au fond* is better than a half educated person.

6620. But would you not, perhaps, think that the teachers, if properly instructed, are so much accustomed to handle the child mind and character that their superior skill in that direction would, perhaps, compensate for their lack of professional knowledge?—I detest saying anything that savours of self-gratulation about my class, but you see a doctor is compelled to get on with children, and anybody who has had to do with this disease is filled with compassion, and I think that the daily work of a doctor really fits him for this.

6621. I presume the information that you would give would not be mainly pathological but very largely moral in its scope?—Yes, I think it could be both moral and physical. I think it is only a doctor who could know exactly how much he might say.

6622. Would you suggest a discreet use should be made of the training college in preparing teachers?—Yes, I think, a great deal; there I should be with you entirely.

6623. Assuming that in many cases children leave too early to receive this instruction could you make any suggestion as to the organisation of instruction, say, in the evening schools or something like that?—I am reluctant to say much about it, because I have not enough practical knowledge of the evening schools; but I do know that medical men have, and can give, very valuable instruction in that way.

6624. Would you rely more upon instruction given in educational institutions, and, perhaps, in great factories, than upon written instruction?—I do not think written instruction is worth the paper it is written upon. The directions given to mothers, for instance, about nursing their children and all the rest of it are perfectly piffing and futile. They are generally misinterpreted, and there must be personal instruction face to face. But I have a great belief in somebody who knows the subject thoroughly dealing with young people.

6625. Some educationalists who are painfully familiar with the unwholesome precocity of many of the children in poor districts have come to realise that, and are teaching what is sometimes known as sex hygiene or physiology, and paving the way at a very early stage by botany and leading up to that?—Yes, I have thought a good deal about that. There is something to be said for it. I think an enormous amount could be done in preparation with regard to sex physiology by the teaching of botany. But that would not carry you very far in regard to what we are now talking about.

6626. May I ask you whether you would doubt that the largest amount of scientific knowledge has a sufficient moral effect. Are not the two in different planes?—Yes, undoubtedly they are. I think that if you go back to the simple things—going back to one's own experience of a good family doctor who knows boys and girls, who has brought them into the world perhaps, and they have come to know him and to trust him in all sorts of contingencies—they will come to him when they are in trouble. I do not admit that there is any single being in the universe who is so competent to give instruction on these subjects as such a man, and I think it is that model we ought to adopt—knowledge combined with sympathy and with personal interest.

6627. So that in any educational measures you would urge the organisation of the medical force, at any rate, to be the backbone of it?—Yes, and, if possible, a family doctor.

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(Mrs. Burgwin.) Dr. Lidgett has just asked what I wanted to know.

6628. (Sir John Collie.) If I may say so, I entirely agree with what you have just said, but may I ask this: If the teaching campaign—which one hopes will be inaugurated after this Committee reports—is anything like adequate, do not you think in these days of busy panel practitioners combined with the difficulties of local authorities finding the money for the fees to pay doctors, there will be considerable difficulty in getting a sufficient number to cover the ground, and that therefore in certain cases, at any rate, it might be advisable for medical men to be selected to teach the teachers these details?—Yes, I think that is possible.

(Mrs. Creighton.) Might I ask a question which bears on this subject?

(Chairman.) Certainly.

6629. (Mrs. Creighton.) I was hearing the other day—I forget whether it was in Sweden or in Norway—that they have organised this teaching in the elementary schools on the lines of calling it, I think, social hygiene, generally through medical men or women who perambulate and give a period of so many weeks' instruction in one school after another. Is that a system of which you would approve?—That would commend itself to me.

6630. You think also medical women would be fitted for this?—Yes, most fitted.

(Mrs. Burgwin.) At what age was this given?

(Mrs. Creighton.) The elementary school age.

(Mrs. Burgwin.) Under 14 years of age?

(Mrs. Creighton.) Yes—not isolated, but put as part of social or sex hygiene, I forget which—in the regular course of instruction.

(Chairman.) But does sex hygiene include the history and dangers of this horrible disease?

(Mrs. Creighton.) Yes; that would all be brought in.

(Chairman.) Would you have to describe syphilis and gonorrhoea to those children?

(Mrs. Creighton.) Yes I believe so. Of course it is all a question of degree. I know this very superficially, and I hope we shall be able to get some fuller knowledge of it. I only wanted to know whether Sir Thomas Barlow would approve of it.

(Witness.) I think it is worth thinking of. I should like to hear it in detail before giving an opinion. You do not want to do it too soon, because if you do it too soon you will arouse a lot of curiosity which is of no value for our purposes. I think one wants to centre one's thoughts on when the danger comes. The danger comes I think just when a boy or girl go to work, and I should think it was thinkable that amongst the provisions which could be made would be that for half-timers, and young people just beginning, that there ought to be some means of systematic teaching just at that juncture.

6631. (Sir John Collie.) Do you know that there are a large number of evening schools in which we teach health subjects?—Yes.

6632. And do you think that that subject might be usefully grafted into some of the lessons on these subjects?—I think it might; but I must confess that the thing I am most anxious for is the face-to-face talk with boys and girls by some really competent person. I am reluctant, having regard to the feeling existing about the subject, to break down a certain wall of delicacy that is placed round it, but I do think that face-to-face talks with individuals is the most hopeful.

6633. I quite agree. Of course you remember we have a very very large population of school children in London?—Yes, that is so.

6634. With regard to the information that might be got with regard to the incidents of venereal disease for the purposes of this Commission, do you agree that it would be practically useless to circularise all the doctors in any given town, and that the information that would be obtained in that way would not really be of material assistance to us?—I do not know. I took part years ago in a movement in connection with the British Medical Association in what was called collective research, in which we sent cards to

practitioners on various matters of disease, and it was very enthusiastically done; but I do not hesitate to say that some of the results got by that method of investigation were absolutely useless, and I confess that I have no confidence at all in it.

6635. And those were all members of the British Medical Association?—Yes, precisely. I look with the greatest distrust upon it.

6636. Now with regard to the question of contagion as against hereditary transmission of this disease. I suppose practically there is no limit to the possibilities of contagion of a young man or young woman who has syphilis in a large town?—No, I do not think there is.

6637. I take it that the class of your work has brought you into contact much more with the evils of transmission than of contagion?—I have seen a good bit of contagion; that is to say I have had it before my mind, and I have seen some notable and some pitiful and tragical instances of it. One thing that struck me is the very small proportion. Of course there have been some very tragical instances I have seen with young adults and so; but really these cases, upon my honour, are few and far between in my experience.

6638. I do not like to press you; but, considering the high position you hold in the profession and the class of work in which you are engaged, do you not think you are more likely to come into contact to a very much greater extent with the transmission by heredity than ordinary contagion of syphilis or gonorrhoea?—Yes, that is true.

6639. I think that ought to bear some relationship to what you said?—Yes, I grant that.

6640. (Dr. Mott.) You have recommended the examination of stillborn children with a view to determining whether the mother was really infected by syphilis, and you said that the evidence would be by gummata?—Yes, there might be; that is one of the evidences, but of course the spirochaetes would be another.

6641. Yes. You would rather advocate, would you not, the examination for spirochaetes with a dark ground microscope?—Yes.

6642. Of course I have examined a good many stillborn children sent to me from the infirmaries, and I have invariably found, by examination of the liver with the dark ground microscope, spirochaetes?—Yes, I am glad you have asked me that. I mentioned in another part of my evidence that, of course, the syphilitic child's organs yield the spirochaete marvellously.

6643. Yes; sometimes in the supra-renals you will find them in pure cultures almost?—Precisely.

6644. But without that examination of the same bodies, I should not have recognised that as congenital syphilis?—Quite so.

6645. Then another method would be easily available, and that would be the Wassermann reaction of the blood?—Yes, quite.

6646. Which is very easily obtained?—Yes, quite.

6647. So that if you applied those two methods, and both were negative, you would say there was another cause?—Yes.

(Dr. Arthur Newsholme.) For how many days can you have a Wassermann after death?

6648. (Dr. Mott.) That is a very important question Dr. Newsholme is asking; because if the foetus is macerated, and infection by other organisms has taken place, the Wassermann becomes unreliable?—Yes.

6649. But supposing the child is born alive, but the mother has given evidence before, by stillbirths and miscarriages, of syphilitic infection, the blood taken from the umbilical cord and sent up for examination, in every case would give us an indication; is it not a very valuable indication?—Very valuable.

6650. And without much trouble?—Very little trouble.

6651. And with complete secrecy too?—Yes, to be sure, and most valuable.

6652. In fact I have had a number of blood specimens sent to me from the infirmaries to test with that view?—Most valuable.

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6653. Then you mentioned that a large number of children are born apparently healthy, but they give a positive Wassermann reaction although they are born healthy?—Later children, you mean.

6654. Yes. That has been shown by Plant; that in fact I think only one out of 34 cases showed any signs on the body at all. These were children of general paralytics, yet they all gave the positive reaction. Then the nervous system is probably infected more often than is generally supposed?—That is the impression I got.

6655. That is borne out by the fact that some French observers, Ravaut and others, have examined the cerebro-spinal fluid in a number of cases of congenital syphilis which have shown lympho-cytosis?

6656. It is just analogous to what we know in acquired syphilis?—Quite so.

6657. Of course if that means infection of the central nervous system a very important point indeed arises whether this is evidence of infection by the spirochaetes?—Yes.

6658. Because if so, one can understand why late in life such patients may develop general paralysis or tabes, the organism remaining latent all that time. Would you agree with that?—Yes, surely.

6659. Then the Chairman asked you a very important question, I think, whether mercury would have been efficacious in these children if the cerebro-spinal fluid were infected?—He did, but I could not answer that; I should certainly try it.

6660. May I suggest to you, and perhaps you will tell me whether you approve of my suggestion, that it depends very much whether there is evidence of inflammation of the membranes?—Quite so.

6661. Because we know that in acquired syphilis mercury has a magical effect on gummatous meningitis?—Undoubtedly.

6662. But it has very little or no effect upon the late manifestations?—Precisely; I should have thought that was unquestionable.

6663. It is known that mercury will not pass into the cerebro-spinal fluid, nor will arsenic?—No.

6664. But it may go into the lymphatics around the vessels?—Precisely.

6665. But not be able to affect the fluid. But another condition may arise, may it not, which was suggested to me by the first case I saw of juvenile general paralysis. It was a little boy who came to my out-patients' room. He was suffering from choroido-retinitis and had a gumma on his arm, and the typical Hutchinsonian teeth. I put him on mercury and kept him on for two years; he got quite well apparently, and he went to one of Barnardo's Homes, and was sent eventually to Canada. He was sent back, and then I found him at the age of 16 in Colney Hatch Asylum dying of general paralysis?—Yes, I have read it.

6666. So that case suggests that mercury had a profound influence on those conditions; but the organism having infected the brain itself, the mercury had no effect whatever?—Yes.

6667. And I have seen many other cases since like that. Then with regard to the term para-syphilis, in the light of our present knowledge do not you think it would be better to term it par-enchymatous syphilis?—I believe it would.

6668. I ask you that because I believe the Royal College of Physicians have adopted the nomenclature of para-syphilis?—Well, it will have to be revised, I am sure.

6669. The reason why I ask you this question is an important one, because para-syphilis means a post-syphilitic affection, and therefore not capable of treatment?—Yes.

6670. But par-enchymatous syphilis means that the organism is still in the body?—Quite so.

6671. And if we are not able to treat it by present means, at any rate we can hope a treatment may arise?—Quite so.

6672. And certainly with regard to locomotor ataxy very satisfactory results have been obtained by systematic and energetic treatment; you will agree with that, will you not?—Yes, that is so.

6673. Then I was very glad to hear you emphasise the fact that alcohol and syphilis worked together. That has been my experience. I have had a large experience at the asylums and in practice, and I know how important that is. There is one other question I would like to ask you. Do you agree with notification in other diseases; in typhoid fever, for instance, do you think it has done any good?—I should have thought so, decidedly.

6674. You hesitate rather?—I should have thought that notification had been very useful in a great many; not so useful as it was expected to be.

6675. Is that not something like the Muzzling Act?—Yes.

6676. When it was not efficiently carried out, hydrophobia continued. In Berlin it was so?—Yes, that is so.

6677. But when they carried it out very efficiently, hydrophobia was stamped out in Prussia?—Yes, that is so.

6678. It is whether the notification is efficiently carried out or not? Of course, if a man has a case of scarlet fever and he says "Oh, well, this is nothing at all," and does not notify—that is the sort of case that renders notification ineffective?—Yes, of course, on general grounds no doubt a knowledge is valuable, and we want to know our enemy, and on general grounds notification is desirable undoubtedly. It is only the point that in this particular disease in the present state of feeling it might I think conceivably frustrate our efforts. It is not a matter of moral conviction; it is a pure matter of tactics.

6679. The only reason I asked you with regard to the notification of other diseases was that a witness here said it had been no use?—That is foolish.

6680. I am glad to hear you say so. Then do you think this would be satisfactory? There are 15 millions who will be on the panel under the Insurance Act, and venereal diseases are treated under the insurance conditions. If a patient came to a doctor suffering with a venereal disease, it is very important that he should come in the very first stage of infection?—Very.

6681. And that the infection should be diagnosed at once?—Yes.

6682. Because if it is not diagnosed in the primary stage, the infection of the whole of the body may take place?—Precisely.

6683. And then the opportunity is gone of curing the case?—Precisely.

6684. That was the evidence we had from both the army and the navy doctors, where this is already treated very efficiently. Supposing we gave this man a card, and on it was indicated, not in terms he or any layman could understand, but the doctor could understand, that he was suffering from this disease, and that he had had a dose of salvarsan. It is very important, is it not, that it should be known to anybody afterwards, if he went away somewhere else, what he had had?—Precisely.

6685. And on that card it was stated that he had had a dose of salvarsan followed by mercury, or whatever treatment was adopted, so that if he went to another doctor after removal, that doctor would know how he had been previously treated?—Yes.

6686. Now on the card he would be instructed as to the dangers of the disease and of transmission to other people, and also he would have it stated that it was a curable disease if he followed out the treatment?—Yes.

6687. It is very necessary to give them hope?—Very.

6688. And not to alarm?—Yes; such as they give at Hamburg.

6689. Yes, such a card as that?—Yes.

6690. You would approve of that?—I think so. That struck me when I read it as being very good indeed.

6691. But then supposing you had a special clinic. I suppose you would rather prefer specialists to do this work of injecting salvarsan than any general practitioner?—Yes, at present I should.

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6692. Then these men would come up to the special clinic, would they not?—Yes, I think so.

6693. Do you not think it would get about, what disease they were suffering from?—Yes, sooner or later it would.

6694. Then what is the difference between that and notification?—Well, that is a proper way of putting it; but still, that method is a very gradual method which from first to last, so to speak, shows it in the interests of the patient.

6695. That is what I expected you would say?—The key of the situation, I think, in this matter is not to obtrude the public health point of view, but to throw everything on to the benefit of the individual.

6696. To avoid as far as possible bureaucracy?—Yes. I can quite conceive that it is a matter of that kind, but it is all a question of the keynote. The keynote it seems to me must be to try to help the individual as soon as possible, to get him well and so on, and then try to influence him. But if you make the keynote a matter of police—it is that—I think you will dislike it.

6697. (*Chairman.*) Do you not think it is possible to make too much of the comfort and the sentiment of the individual, and neglect too much the interests of the public?—I look upon it entirely from the point of view of how one can get one's purpose accomplished. I realise the value of the importance of the public good, and the State acting for the public good. It is just a question how the State is going to work so as to bring it about in the best way. I think if you bring it about as Dr. Mott has sketched, and as I know it has been in Hamburg and so on, I can conceive that it would be very unobjectionable.

6698. And you would not say that the State had not a right to take these steps to protect its subjects?—I am painfully conscious of a great deal of hardship in the way in which the State often does it, a great deal of hardship in the way it is worked, and a great deal of antipathy it arouses, especially in the English individual's mind, and I do not think it is worth while to run against a stone wall. But then I may be quite wrong in this.

6699. But if it could be worked without hardship in the nature of publicity in the case of an individual, in that case you would not object?—No, I do not know that I should. I have no real fundamental objection to state interference, but it is a question of leading and driving.

6700. But, as Dr. Mott has put to you, anyone who goes into an institution must run some risks of the nature of his disease being found out, so that the notification would not really affect him. He is notified practically to all intents and purposes. It is only the people who go to private practitioners and do not go into institutions who would fear that there would be disturbance?—Yes.

6701. (*Dr. Arthur Newsholme.*) I think I started that hare about the fact of a man being registered at a clinique constituting notification, but I did not intend it to go quite so far. I would suggest it does not necessarily mean any notification to the public health authority?—No, quite so.

6702. But only to the hospital doctor?—Yes.

6703. It might stop halfway?—Quite so.

6704. If you do not go the whole way you might stop halfway?—Yes.

(*Dr. Arthur Newsholme.*) But if the State has the man at the hospital or clinique, that is all it wants. It does not want to notify to the public health authority at all. I think it is important to have the possible distinction in mind.

6705. (*Mrs. Scharlieb.*) With regard to education, do you think well of the imparting of a knowledge of elementary physiology of the whole body, and the care of the whole body, to children, and the imparting of additional knowledge as to the risks of life to adolescents?—Yes, I do. I think a great deal of physiology can be taught without offence.

6706. And do not you think that our physiology books that are given to the elementary scholars should deal with the whole human body in a spirit of perfect

simplicity without any personal application whatever?—Without any application to disease, do you mean?

6707. Yes, certainly no application to disease?—Yes, no application to disease.

6708. But simply just as circulation, respiration, digestion; why not also in equally simple language and manner, reproduction?—Yes; I think it requires enormous wisdom to know exactly where to stop. One has to remember that Professor Huxley, who was not a strait-laced person, and was one of the finest teachers we ever had in this country, when he wrote his *Manual of Physiology*, left out the reproductive functions, and you remember that book was a masterpiece.

6709. But, do not you think if Professor Huxley were alive now?—He might think differently.

6710. Or if someone else were going to write, now that this conspiracy of silence has fallen to the ground, that he would teach children quite simply?—Yes.

6711. You know how children learn the facts of the Bible?—Yes.

6712. But it does not hurt them in the least?—Not the least.

6713. They learn the facts. Would not it be as well if they learnt the facts of physiology decently and nicely, and not in the awful way in which children of the poorer classes learn them now?—Yes; it is awful the way they learn them now. They learn them in the very worst way.

6714. Experienced teachers tell us there is not a boy or a girl leaving the elementary schools who does not know the facts of life as much as his father and mother know them; and that not in a pure and reverent way, but in a most horrible way?—Yes.

6715. Therefore, why not teach them the outlines of reproduction the same as they are taught the outlines of digestion?—Yes; of course, as I said just now, I think an enormous amount might be made out of the study of botany, because that is a way in which you can bring home to the mind the essential facts of reproduction, and reproduction in the animal kingdom does not come in the way of such a tremendous shock. They have come to know the manner of the union of the sperm and the germ and so on, and their minds are prepared.

6716. Small children are not shocked by anything?—Quite so.

6717. It is the adolescents we want to teach?—Yes.

6718. Then you would probably hold that when young men and women are going out into the world, say at 17 or 18 years of age, they should be warned on the physiological side of the dangers they run?—Yes; I quite think that some knowledge of physiology, given with discretion and by a master might be a fitting basis.

6719. Yes, quite so. Then, with regard to other people, the mother is the right person to impart any knowledge that is necessary to impart to small children?—Yes.

6720. How can we teach the mother?—I think that is very valuable; I should have great confidence in this propaganda if it would tackle the question of in what sort of way to teach the mothers. Besides the family doctor, I should say the mother is the person to impart knowledge, and I believe that something has been done in some of the Western States of Canada in the way of special teaching to women of these sexual conditions, and that has been of the most wholesome character and has been done without any offence whatever.

6721. Do not you think that women doctors and others who have adequate knowledge might teach the mothers through the Mothers' Union and Schools for Mothers, and so on?—Yes, I do.

6722. You would get a good deal in that way?—Yes, a great deal.

6723. Men doctors should have classes for men and classes for boys?—Yes, true.

6724. Then, with regard to our medical students, most of us have had a very decent medical education, but I do not hesitate to say that ten years ago my knowledge of this subject was absolutely inadequate—

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very inadequate. Do not you think our young men and young women students are not taught in a sufficiently practical manner?—That may be; but it seems to me, in the present state of knowledge, that to give them a complete equipment is absolutely impossible, and I think that we ought more and more to insist in medical education that people must have practical experience in treating cases after the systematic work is over. I think that will be the solution; but I do not quite see that we could very well load the medical curriculum any more at present.

6725. No, I do not think we could; only I thought we might possibly be able to give rather senior students a little more insight into the scientific methods of examining for the spirochæte and the Wassermann reaction, and so on?—Yes. The only thing is, I would venture to suggest, that a lot of that investigation, to be really reliable and thorough, would have to be done by specialists—by experts. General practitioners cannot do everything in this country, and I think if the Government can see their way to increase the opportunities for expert investigation in some of these lines, that will be the quickest way of doing it and the most reliable way.

6726. The finding of the spirochæte would not be more difficult than the finding of the itch insect?—Of course, I have seen some blunders made.

6727. No doubt there always are. I notice that in the 7th article of your manifesto you speak of the great importance of maintaining continual supervision of parents and families?—Yes.

6728. And I am sure we must all quite agree. Could you indicate in any way how this supervision is to be exercised, and by whom?—That is a different thing. I think the doctors are the people who should keep in touch with it. In my own case I used to have the children at Great Ormond Street, and then I used of course to see the mother, and I used to get the mother and the father to come to me at the University Hospital, and I had some of these cases under observation for 20 years.

6729. Then in the case where they were not so fortunately circumstanced, where they were not going to a special hospital like Great Ormond Street, the family practitioner might do that?—Quite so.

6730. And then later on, what about the school doctor?—That is attacking from another point of view; but it is a very valuable one. That illustrates exactly what I have been pointing out. Great tact is required. There have been a good many cases of bad blood that has been raised by the interference of the school doctor, and it is very important to insist that he should be a man of tact and kindness in the way he indicates to the school authorities and to the parents of the children the measures that should be adopted. There is nothing more striking, I think, bearing on what I have tried to indicate, than the good that the school doctor can do if he goes about it in a very kindly way. But if he is a bureaucratic official, and has not to deal practically with men and women, and manage men and women and so forth, he can set people by the ears in the most terrible way.

6731. Might I ask you whether you are at all disposed to emphasise the terrible injuries inflicted, especially upon women, by gonorrhœa. Do you not regard gonorrhœa as the cause of a very large percentage of sterility in women?—Yes, and of suffering incalculable.

6732. And it is also probably the cause of, perhaps we might say, 50 or 60 per cent. of the major operations performed on women's pelvic organs?—Yes, precisely.

6733. Should we not endeavour to get a more serious view taken of it?—Yes, I think we should. I think there has been a considerable improvement in the way in which it is regarded, of course of late years, but I am entirely with you. I think it is terrible.

6734. (Dr. Mott.) There is only one question I should like to ask, and that is with regard to the card system. Printed on the card will be directions for marriage?—Yes.

6735. And it will state that a man is infective for three years, probably?—Yes.

6736. Now, supposing that this man, having had this card given to him, marries, what would you do?—I do not know.

6737. Would you show him any sympathy?—That is a very difficult thing.

6738. I do not think you would?—No.

6739. (Chairman.) Would you make it a ground for divorce?—I think I should almost go that length.

(Dr. Mott.) In Germany it would be annulment. I think that is more efficient than divorce. It is a breach of contract really.

(Chairman.) Yes, it is.

6740. (Dr. Mott.) You would agree with that?—Yes, I think I should.

(Sir Kenelm Digby.) Incapacity for marriage.

(Dr. Mott.) Yes, incapacity for marriage.

6741. (Mrs. Creighton.) One has heard a good deal of alarmist talk about absolutely innocent infection. Do you think there is so much of that as is said?—No, I do not.

6742. Can you suggest any means by which we could arrive at any facts with regard to innocent infection?—Of course some of the cases of infection are very marked. Those are definite enough. Cases of contagion with a cup for instance, and one has seen some very striking cases; but, as I said, they are few and far between in my small experience. But what particular cases were you alluding to?

6743. I was thinking of those of nurses and doctors?—Yes, some of them are pitiful. There was a case of a doctor attending a woman with syphilis and getting a chancre on his finger. I have seen a goodly number of those, and those are amongst the most tragic things in practice.

6744. And it is the same with nurses, I suppose?—Yes, I have seen them in nurses too; but I have seen more of them in doctors than in nurses.

6745. Is there any way in which we can arrive at the number of times it occurs?—Yes, I should think there is. I should think that the hospital physicians and surgeons—for instance, Mr. Lane—could answer that better than I. Those cases are generally very thoroughly investigated, and I think the details of a goodly number of them could be got. I have happened to see cases of that kind where the result has been most virulent, going on to relapsing disease of various kinds, and sometimes even to brain troubles, and ending up some of them with locomotor ataxy. I have seen very striking instances of that.

6746. And that in spite of the fact that in the case of a medical man he should have known what it was at once, and treated it at once?—It is a curious thing that these chancres on the finger are not easy to recognise. There again I speak under correction. Mr. Lane would tell you about it better than I can; but it is such an unusual thing; at least you do not think of it. It does not enter into your ordinary scope, and it may be very insidious. It is only when the rashes come out that you identify it.

6747. (Dr. Mott.) But now it would be easy with the spirochæte?—Yes, it would.

6748. (Mrs. Creighton.) Then one other point about the educational matter as regards young men. You have talked about the advantage of the family doctor, and the advice he could give; but I suppose that a young man, either a clerk in the city or even an undergraduate at college, if he had any reason to suspect that he was infected would probably not go to the family doctor?—Some of them would and some would not.

6749. Have you any idea about the sort of doctors all these boys in the city and elsewhere go to?—There are some doctors who have rooms in the city and have a very large practice, including cases of that kind. Of course naturally—and it is the right thing if you want to keep the thing secret—if they can go—and some of them no doubt would go—to a man who was not the family doctor, I have no reason at all to say that the men having city practices do not treat them very well indeed, because they do.

6750. Have you thought of any way in which educational methods could be brought to bear on that particular class of young men?—I think something can be

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done by Sunday afternoon conferences specially for men, and continuation classes. I am quite certain that Sunday afternoon conferences can do something.

6751. And you would think that conferences of that sort at which a doctor addressed the young men would be very useful?—Yes, I think they would be very useful.

6752. (*Mr. Lane.*) I understood you to say that the dangers of contagion in regard to syphilis were rather over-estimated?—I think in some directions they are. Of course I must correct it in regard to what I have just said. I think the dangers of contagion to doctors attending midwifery cases are very real indeed. I remember a number of cases where in a family there have been undoubted cases from mucous tubercles at the corners of the mouth. I remember cases where there was some reason to think even a cup has been the means of carrying it; but, as I said before, those cases in my experience when contrasted with the others have been few and far between.

6753. But you would insist on the patient having a clear knowledge of the risks he runs of transmitting the disease?—Yes, I should.

6754. Then with regard to notification, you are not very enthusiastic about the notification of these diseases?—Only as a question of tactics. I have no moral objection to it; far from it.

6755. But you think the effect would rather be to put the patient in some fear and trepidation when he went to visit his physician?—Yes, I think the danger would be of concealment.

6756. And if this is to be enforced, what penalty and on whom would the penalty for non-notification fall—on the doctor?—That is one of the difficulties. I think every case must be judged on its merits. There are cases where the doctor would feel quite certain that the risk of any harm was a negligible quantity, and in that case it would be a hardship to make it imperative that he should notify it.

6757. Then that notification would be of no value as regards statistics?—No, it would not.

6758. Then you were talking about the value of mercury during pregnancy. You would admit also the equal value of salvarsan, would you not?—Yes, and its value in rendering the case non-infective for a time.

6759. You would emphasise the administration of salvarsan during the period of pregnancy?—Quite so.

6760. And you would be able to give the patient hopes of the production of a healthy child?—Yes, certainly.

6761. Because you will admit the disease can be considerably modified, just as much modified during pregnancy as in other conditions?—Quite so.

6762. I have only one question about gonorrhœa in children. The cases of acquired gonorrhœa in children are not very common, and there are a good many cases of discharges in children with which you are familiar?—Yes, a few are virulent, but a great many are not virulent.

6763. There are some very troublesome cases of non-gonorrhœal discharges in young girls due to dirt and neglect?—Quite so.

6764. It is the ordinary condition known as vulvovaginitis?—Quite.

6765. You were asked some questions as to the value of notification of typhoid; but would you say there was any analogy in the notification of a disease like gonorrhœa or syphilis and typhoid?—Of course there are some analogies, but there are a good many differences.

6766. With syphilis a man can go about his employment and no one know of it?—Precisely.

6767. (*Sir Kenelm Digby.*) Notwithstanding your dislike of legal remedies, I should like to put one or two points to you to see whether the law cannot assist to some extent. I suppose it is the case, is it not, that there is very considerable reluctance in a person coming to the doctor when the disease is first contracted, and when he can most effectively treat it?—Yes, there is.

6768. It is difficult to get him to the doctor?—Yes, no doubt.

6769. I will just put this supposition to you. I suppose you will also agree that there is a moral

obligation upon him, not only for his own sake, but for the sake of possible consequences—I mean he ought to go?—Yes, surely.

6770. Is it altogether out of the question to recognise that he has a legal obligation also? Supposing by Act of Parliament it was declared that it is the duty of anyone who has contracted this disease, whether it be man or woman, to have recourse to a qualified medical man. Of course, the danger would be that it would not be acted upon. But where you have public opinion behind you, as you would in this case, that it is an absolute duty to obtain proper treatment at the earliest possible stage, is there any great objection to saying it is a legal duty also?—I think my view of it for what it is worth is entirely opportunist. It is entirely from the point of view of tactics, and entirely from the point of view of getting your way in the best way it can be done.

6771. I am only going to the value now. It is a legal duty to do this. Where the law makes a declaration of that kind, does not that of itself have a great deal of educative value; I mean does it not tend to spread the idea that it is an obligation?—I am trying to put myself in the position of a young man who has got trouble of this sort. He is unmarried; he has no children dependent upon him, and he says that he will keep himself clean, and avoid any chance of infecting other people. It seems to me very difficult to put an obligation on a person of that kind in such a way as will carry his conviction with it.

6772. Let us take it a step further. I see your difficulty?—I quite admit when a man is married it is different.

6773. Still, a man must look ahead; he must look to the time when he will marry; and according to your very striking evidence, he marries with very great risk even at the best?—Surely.

6774. Let us just carry it a step further. Of course the Notification of Diseases Act throws an obligation upon the doctor in the first place—which is quite inapplicable to a case of this kind—upon the head of the house or the occupier of the house, and that, of course, could not be applied to this case?—Quite so.

6775. But you might conceivably apply it to the doctor?—May I point out one terrible point as to why one should be really reluctant to do it as far as the doctor is concerned; that is the uncertainty of diagnosis; and it is so much easier to stop short of an absolute statement than it is when you have made a statement that can be varied or disproved. But you may say you are very positive about this Wassermann test; well, that may be, but to get that done, of course, means a man being asked “why are you doing it?” and if it is to be supplied by the State it seems to me the very fact of going to have it done might be a certain amount of taboo.

6776. I can see the objection—the strong objection to the patient knowing that the doctor would notify so that the patient would not go to the doctor?—Yes; then the doctor may be landed in having done a very serious damage to somebody. That is why one always must allow for the fallibility of a doctor's knowledge and information and anything of this kind might damage a man's character irreparably.

6777. It is rather late in the day to start a new hare altogether, but I should like to put this to you for the sake of raising the suggestion. Is it not possible that we might find a way of avoiding that? Take Dr. Mott's suggestion about the card?—Yes, I think you may do a great deal in that way, but that is not exactly a legal enactment.

6778. No; but I want to see whether one cannot devise a plan which will to some extent meet the objections to bringing the law in at all?—Yes, I think it is quite likely.

6779. The two things we have to deal with now is the obligation upon the patient to come to the doctor; and secondly, the obligation upon the doctor to notify the disease to the proper person. I will come to that in a moment or two as to how he should notify; but those are the two legal obligations we suggest are possible?—Yes.

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6780. One or two witnesses have advocated the establishment of some sort of central institution—let us call it for instance a registry for venereal diseases or something of that sort—where there should be a register kept of venereal diseases and patients. That is to say, supposing the notification of the disease went not to the medical officer of health but to this central institution—perhaps I am talking from my experience at the Home Office—supposing it went in the form of a card such as Dr. Mott suggests, not giving the name of the patient—I should not give the name of the patient—but giving the diagnosis of the disease in medical language and the sort of facts you would enter in your book I suppose in the ordinary way, and supposing you also gave the patient's finger prints?—Yes.

6781. Supposing the doctor were to say this to him: "I am sorry, but the law obliges me to notify this disease and if you will put your hands down on this piece of paper I will send that up to the proper office," there would be the first stage in the medical history of this patient?—Yes.

6782. And supposing he goes elsewhere?—Yes, he has it to take with him.

6783. And was treated by another medical man and that medical man wants to know whether he has been treated before he could get the information at once. I am only suggesting that as possible?—May I say this; that the key of the doctor's influence with the patient is that for the time being those two are in contact. The patient should think, "Here is a man who has got my supreme interests at stake; he is not looking at me in the interests of the State; he is looking at me in my own interests." I fear that all these methods of notification run the risk of breaking that sort of solemn compact and in so far as they do that, that lesson of effectiveness, the magnetic power if you like to call it—

6784. I feel the force of that; but is not the advantage on the other side to be considered very much indeed in the first place having this record and being able to refer to it?—I of course myself have a profound distrust of all statistics. I think they are not only very often inadequate and very inconclusive; but I go further than that: they are sometimes mischievous. I think statistics are responsible for some of the very worst medical heresies.

6785. But is not this a case which really?—? Would lend itself to statistics?

6786. No. Would the ordinary case be: he came with the ordinary symptoms and was treated in a particular way, and that would be about all?—I myself have the strongest faith in providing the best methods of diagnosis and disseminating knowledge, complete and accurate knowledge, and appealing to the moral feelings of people generally; and I think if you will provide the diagnosis, and ready means of enlisting all the influences of public opinion of different kinds on your side, you will do a thousand times more than you would do by any methods of registration.

6787. I agree. Still, you are now treating patients of all classes. You are treating a disease generally. You treat the private patient and you treat the patient who is an insured person by the panel doctor, and you treat the patient who resorts to the out-patients' department of a hospital or a Poor Law infirmary?—Yes.

6788. Would not it be a great advantage to have some central body which would have a record of all these cases? It seems quite feasible?—I do not like to say anything disrespectful; but I think people would be buried under them.

6789. Then one more point as regards the consequences of this disease as regards marriage. It has been touched on by several people. I daresay you are familiar with the recommendations of the Divorce Commission on that point?—Yes.

6790. They propose that the communication of disease by one married person to another, knowingly or negligently, should be a reason for a judicial separation, not a separate offence but a reason for

judicial separation. Dr. Mott suggested just now, I think, that it might be a case of nullity; that is to say that the mere fact of marriage after having had the disease, and I suppose without some evidence—which I suppose must be in the form of a medical certificate—of the reasonable safety of marriage, must be a case for nullity of marriage or separation, or some consequence of that kind?—Yes.

6791. I think you rather agree to that?—I do not know enough about that. I do know this: that in spite of very grave disease—I think the forgiveness of women is very great indeed—I think sometimes people will arrange between them a *modus vivendi* which is better than anything we can do by interference. I view with the greatest reluctance the interference of the law as far as it can be avoided.

6792. Yes, of course; but this law would not be put in force probably in a case of that kind. It would hardly be applicable there if the woman wished to make an arrangement of that sort; that would not be illegal at all. But if she chose to put the law in force it would be a case of nullity of marriage. There are numbers of cases no doubt now which do not come into court?—True.

6793. Of course for that sort of purpose some such machinery as I have been hinting at would be very valuable?—It might. I do not think my opinion is worth much on that.

6794. I think it is worth a very great deal as to the practical effect of the way in which it would work?—I think we want to be very careful, or else we shall spoil a good many family relationships that do get patched up.

6795. Still, we have to deal with the poorer classes too and there is a great deal of misery?—Yes, true.

6796. (Chairman.) You spoke of the magnetic relations between the doctor and his patient. You are speaking rather in the terms of the higher social plane?—But also with regard to the poor people.

6797. Between the panel doctor and the patient?—Yes. Some panel doctors have remarkably good relations with their patients.

6798. Magnetic relations?—I would not use that sentimental word; but I think the relations of doctors to poor people are splendid sometimes.

6799. But you do agree that the kindest thing you can do to an individual who has this disease is to force him to the doctor at the earlier possible moment?—I should sooner say to encourage him to go to the doctor.

6800. Anyhow, to get him to the doctor?—I think on his own merits, as being a sick man and needing it, I would be emphatic if you like and tell him of the dreadful results that would accrue if he did not, but I do not think you should make the doctor a policeman, or that in any way he should act as a policeman.

6801. But you want to get him there in some way?—Yes.

6802. (Sir Kenelm Digby.) You have thrown upon him already now by the Notification of Diseases Act the obligation to notify?—In regard to other diseases.

6803. In regard to infectious diseases?—Yes, in a sort of way.

6804. Is not there a strong case for throwing upon someone the obligation with regard to these diseases?—If I could believe it would accomplish the purpose as well, I would be in favour of it. I have no fundamental objection to it. As I said, I only wish to do what will effect the purpose best.

6805. (Dr. Mott.) It has been in force, of course, in Scandinavian countries for a great number of years?—Yes, that is so; but of course the English people are different.

6806. (Chairman.) But if you get him to the doctor at the earliest possible period, by whatever way you do it it is much the best thing for the individual and much the best thing for the State?—Surely.

(Chairman.) We are much obliged to you for the information you have given us.

The witness withdrew.

NINETEENTH DAY.

Monday, 16th February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., MD.
The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALTER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.
Mr. PHILIP SNOWDEN, M.P.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. CARL BROWNING, M.D., D.P.H., called and examined.

6807. (*Chairman*.) You are now Director of the Laboratory of Clinical Pathology and Lecturer in Clinical Pathology in the Glasgow University?—Yes.

6808. And you acted for two years as official assistant to Professor Ehrlich?—Yes.

6809. So that you went through the whole of this laboratory work before you took up this important position at Glasgow?—Yes; it was my laboratory training that induced me to take up this investigation.

6810. Then you say that for the past 11 years you have been engaged in investigating the nature of the alterations which occur in the blood in infective diseases, and that led you to examine the change in the blood-serum of syphilitics which gives rise to the Wassermann reaction?—Yes.

6811. You became convinced that the Wassermann test, when properly carried out, constitutes an important sign of the disease, and that led you on to a collective serological and clinical investigation which had for its objects the determination, firstly, of the incidence of syphilis in certain portions of the community, and, secondly, the association of syphilis with special diseases; is that so?—Yes, that is so.

6812. Now, all these tests on which a great number of your figures depend were carried out in your University laboratory?—They were carried out under my control.

6813. Entirely under your control?—Yes.

6814. Have you any special method of carrying out the Wassermann test; or what form of test do you prefer?—We have experimented to a considerable extent on the methods of performing the test and have elaborated one which I published in conjunction with Drs. Cruickshank and Mackenzie. It is a method that is considerably longer, I should say three or four times longer, than that usually applied, and that method has been carried out through all the observations.

6815. You are satisfied that it is a better and more accurate test than the earlier form in which the test was applied?—Yes. I am convinced that it will detect any fallacy in such a test.

6816. You wish, I understand, to be examined on your paper printed in the "British Medical Journal" of the 10th January last?—Yes.

6817. You lay down as a general fact that no infective condition invariably presents characteristic clinical appearances. You mean by that, that clinical observation alone would fail in a large number of cases to reveal the true nature of the disease?—I think that applies to every infective disease, especially to syphilis.

6818. You point out that any comparatively characteristic disease, like diphtheria and typhoid fever, may be readily missed; by clinical observation, I suppose you mean?—Yes.

6819. And that you regard syphilis as being much more easily missed than those other diseases?—I think that is so, both through the nature of the disease and also through the comparatively insufficient training that ordinary practitioners receive as students. I

myself, I suppose, received the ordinary training, and I do not think I knew much that was worth knowing about syphilis in its practical aspect.

6820. When you were going through your training you were not taught this; but I suppose at that time we did not know nearly so much about these diseases as we know now?—No, we did not know so much; but I did not then have the facilities even for seeing the conditions to a great extent, and I believe such is still the case.

6821. You point out as a consideration of the highest importance that the subjects of syphilitic infection, unless treated by the most energetic methods, almost invariably pass through the carrier stage. That would be the stage, I suppose, in which they would be most infectious, and most dangerous, therefore, to the public health?—Yes, most dangerous because undetected.

6822. What do you define as the carrier stage in syphilis?—It is the period which supervenes after the primary and the diffuse secondary manifestations have disappeared, in which the patient may think himself in good health—and in which any lesions are of a comparatively minor character.

6823. And those earlier stages may pass as the result of treatment, or even without treatment, but at the end they leave the patient in a highly infective condition?—Yes, and that infective condition is usually most marked at first and disappears later. The period of disappearance is most variable. I refer to a man who was still infective 13 years after a slight course of treatment.

6824. Then the latent stage may be induced by mercurial treatment and still leave the patient in a tremendously infective condition?—I think that is frequently so.

6825. And your experience is that the latent syphilitic in the earlier stage, although he is apparently healthy, is a real source of danger to other people?—That is the general experience; from what I have seen I would agree to that.

6826. Then you tell us of the fact that the characteristic primary and secondary stages may be missed or suppressed altogether, so that the infective individual is not actually aware of his state. Would you explain how that occurs?—I am not able to say how it occurs, but I am quite sure from my own observations that it does occur. For some reason or other the disease does not follow what has been called the typical course. The typical course is merely what statistically is usual, but the variations from the usual are not uncommon.

6827. Do you draw a marked distinction in that connection between acquired and congenital syphilis?—A more or less atypical course is a very frequent condition in congenital syphilis, as Sir Johnathan Hutchinson pointed out long ago.

6828. That the earlier stages are missed in those cases, and the later stages show in the congenitally

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[Continued.]

afflicted person?—Yes. Also in the mothers of syphilitic children the absence of the early manifestations—it is a very common condition.

6829. Most of your own investigation has been carried out among patients at the Glasgow Infirmaries?—Yes, they have been carried out in connection with several of the Glasgow infirmaries.

6830. How many patients has the Glasgow Infirmary?—The Western Infirmary, to which I am attached, has 590 beds.

6831. And how many out-patients do they treat annually?—30,000 last year.

6832. In the hospitals are syphilitics taken in for treatment?—I understand that the hospitals have the right to refuse cases of that kind.

6833. Has it exercised that right?—I believe so, or possibly the cases are not offered to the hospitals.

6834. Have you yourself treated cases in the infirmary itself?—Yes, I have treated cases.

6835. In bed?—In bed, but mainly cases of late syphilitic conditions.

6836. That is to say, the hospital does not take the patient just at the time when a hospital might be most useful to him?—I think that is the general attitude.

6837. And you think that in a large infirmary like the Western Infirmary there should be much more special provision for the treatment of syphilis in its early stages?—I should think it would be wise to take in such patients on an extensive scale.

6838. But if it does not, that means that the poorer classes in Glasgow cannot get any proper modern treatment at all, does it not?—Yes, it amounts to that.

6839. Is not that rather a serious matter?—I think it is very serious from the point of view of the general health.

6840. Now you allude to the examination of over 3,000 cases. I suppose it is upon that examination that you base a good many of your opinions?—Yes.

6841. And you draw the conclusion that the Wassermann test cannot well be controverted provided it is carried out under thoroughly reasonable conditions. That means that you are now satisfied that the test as carried out by you is absolutely trustworthy?—I think that it has a very high degree of trustworthiness. There is practically no test in medicine that is more trustworthy. If it fails, it fails through missing certain cases of syphilis. I am speaking of course with regard to conditions of disease common to this country; because one knows that leprosy, for example, gives a positive Wassermann reaction, so there are a certain number of diseases in which there might be confusion, but they are not diseases common to this country.

6842. Have you come to the conclusion that as regards other diseases in this country, they would not by themselves give rise to a positive reaction?—Yes, I have come to that conclusion.

6843. But there are some other special diseases in which the positive test might show, even if there were no syphilitic taint?—Yes, that is my conclusion.

6844. At the bottom of page 3 you give us a number of percentages in which a positive Wassermann was obtained. Those percentages are 95 in the secondary, 75 in the tertiary, 50 per cent. in the latent, and 95 per cent. of congenital syphilis with lesions. What are those particular figures based upon? Where do you get them from?—These are figures that represent the mass of evidence, both our own and others. They represent the average evidence throughout the countries where syphilis has been investigated by this reaction.

6845. Do you think from your experience that those percentages can be safely accepted by the Commission?—I think these are very fair percentages.

6846. They show, do they not, that as far as secondary syphilis and congenital syphilis are concerned, not many cases are missed?—Yes, not many cases are missed at those stages.

6847. But when you get into the latent stage, apparently half the cases may be missed?—About half the cases.

6848. If that is so, there must be, even when cases are brought to the somewhat severe test of the Wassermann reaction, a large number of cases which are missed altogether?—I think so.

6849. And those cases, as you have said previously in your evidence, in the latent stage, would be dangerous cases?—Certainly; a considerable proportion of those in the earlier latent stage are dangerous.

6850. Then you give us 364 selected cases which you say are brought together as evidence that the positive reaction does really indicate syphilitic infection. Perhaps you will explain your argument from those cases on page 4?—These were cases which were taken from the dispensary of the Sick Children's Hospital, and from other dispensaries by one of my collaborators, Dr. Watson. He made a very careful inquiry, interrogating the parents or members of the family who were present with the children, and cases presenting suspicious phenomena, either as regards family history or their own state, were rejected. I have noted the conditions which were regarded as suspicious, viz., where the mother had abortions or miscarriages, or where other children had been born prematurely or had died from suspicious conditions in infancy.

6851. May we take it that those 364 cases were cases in which no evidence other than the Wassermann test pointed in any way to syphilis?—There was no clinical evidence of syphilis in these cases.

6852. Therefore, apart from the Wassermann test, it would be safe to assume that there was no syphilitic taint among any of them?—Yes.

6853. As a result of your test in the cases selected because syphilis was not suspected, you got 3.5 per cent. of positive, and then you say, "Percentage of families with positive reacting members 2 per cent." What does "families" mean—of all the families 2 per cent. had some member?—Yes, 2 per cent. had some member who reacted positively.

6854. You say that all those cases were not brought to the Wassermann test; in one-third of the cases the history was taken before the test was applied?—What I mean is that in one-third of the cases the history was used as the criterion of selection.

6855. The history alone?—Yes, and the Wassermann test was then carried out to see how far it corresponded with the history. In the other cases the history was taken at some other time.

6856. But in every one of those cases the test was applied?—In all these cases the test was applied.

6857. According to the methods adopted at your laboratory?—Yes, by our method.

6858. Now we come to your 97 children belonging to 83 families. In every case of those children or families there was clinical evidence or a family history of syphilis?—Yes, there was such evidence in every case.

6859. So they were taken, I suppose, as a contrast to the children selected for the other list in which there is no suspicion of syphilis?—Yes.

6860. Then of these children who did give evidence or a family history, you get 70 per cent. of positive cases, 27 per cent. of negative and 66 per cent. of families?—No, those are the actual figures; they are not percentages.

6861. Sixty-six families out of 83 families giving a positive reaction and 17 only giving negative reactions; that is a high percentage, is it not?—In what respect do you regard the percentage as high? The presence of syphilis was suspected from the clinical evidence in all these families.

6862. You work it out at 72 per cent. of the cases and 80 per cent. of the families reacting positively?—I think the result supplies the proof of the reliability of the Wassermann reaction.

6863. But in those cases it is possible that the test may have missed some?—Yes, certainly.

6864. And if repeated after a lapse of a few years the positive test might be shown?—It might. I should like to adduce an example of a family containing four congenitally deaf children that we investigated along with Dr. Kerr Love, in which there were seven members altogether, including the parents; we were able to

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prove the presence of syphilis only through getting a definite positive Wassermann reaction in a single child. Where there is latency it is very easy to miss the condition.

6865. And you draw from that conclusion that the positive Wassermann reaction, in the absence of other evidence, may be accepted as a valid proof of the presence of syphilis, and that is the conclusion to which you have arrived?—Yes, that is the conclusion. In addition the Wassermann test will frequently lead to the detection of syphilis where the history fails, because the history depends on so many human factors where fallibility, the honesty of people or their ignorance may intervene.

6866. Is that your general experience, that people will tell you that they may have been infected, or that they conceal the fact of their having been infected?—The tendency towards concealment is very great. But my collaborators who were investigating eye diseases came to the conclusion that the result of the Wassermann reaction was the best weapon for obtaining an admission of syphilitic infection. They met with over a half-a-dozen cases of iritis who were quite unable to supply the clinicians with information.

6867. Unable or unwilling?—They professed to be unable; but when they were told that the Wassermann syphilis reaction was positive, their recollection was then refreshed, and they admitted syphilis; so that one of these men writing to me said, "We have regarded the Wassermann reaction as a criterion of honesty."

6868. There are new possibilities opened up. Now you give some cases provided by Dr. Gilmour, who obtained the reactions with the blood serum in 96 per cent. of cases?—That was in general paralysis. I should like to quote certain figures which give the collected results of the pathologists at Gartloch District Asylum, where they carried out an examination of consecutive admissions, excluding general paralytics. Gartloch is a Scottish Parish Asylum. The number of cases omitted from the test is almost negligible, only three or four. Among 306 cases they obtained a positive reaction altogether in 21 per cent., that comprised 132 males of whom 22 per cent. were positive, and 174 females of whom 20 per cent. were positive—22 per cent. males and 20 per cent. females—in cases which were not general paralysis were thus proved to be syphilitic. As of interest, I would like to say, too, that many more cases, not general paralytics, give a positive reaction with the cerebro-spinal fluid than has heretofore been supposed by many workers.

6869. I am coming to that. Then it would be the case that if the test is not applied in the cerebro-spinal fluid, the true nature of the disease might be missed, in certain cases at all events?—It might be missed. It is very rare, however, for the cerebro spinal fluid to react positively and the blood negatively. Dr. Gilmour only found one general paralytic in which the cerebro-spinal fluid was always positive and the blood to the end of life always negative.

6870. Do you deduce from this, therefore, that "para-syphilitic condition" is a misleading term; that that is not the right term. It is not a sequela of syphilis, but it is the direct result of the virus of syphilis?—The Wassermann reaction strongly suggested that; and the later investigators who have found the spirochæte in the brain in cases of general paralysis have definitely proved its syphilitic nature.

6871. You accept that; that it is not a condition merely of sequela of a syphilitic attack, but it is due to the direct action of the virus of syphilis in the system?—Yes, I am convinced it is syphilis.

6872. You go on to say that no one doubts that interstitial keratitis is a syphilitic manifestation. That is now your fixed opinion?—Yes, we got as high a percentage of positives in that also as in general paralysis—95 per cent.

6873. Which must mean that the connection is obvious?—Yes.

6874. But yet you find that in many cases of interstitial keratitis the patient does not respond to anti-syphilitic remedies even when energetically

applied?—Yes, the condition is very intractable, just as certain other late syphilitic condition. When syphilitic infection has been for a long time in the body, the possibility of influencing it by treatment becomes less and less; treatment must be applied early.

6875. So that really the point is that it is too late at that stage—at the keratitis stage, when the disease is established, it is too late?—It is too late for effective treatment in many cases.

6876. Then you give a table in which you refer to the effects of syphilis on the health of the community. You realise, I suppose, as well as we do, that it is exceedingly difficult to get any positive figures establishing the prevalence of the disease in the general community in Great Britain?—Yes, I think it is practically impossible.

6877. But do you think it is possible for us at least to establish that there is a large proportion of the population of infirmaries and hospitals which has the taint of syphilis in it?—That is perfectly possible, I believe.

6878. And that, if ascertained, would at least give some indication of the prevalence in the general population?—It would give a very important indication, because it is the hospital portion of the community that is the disabled portion.

6879. And at least it would show a tremendous loss to the country in life and brain power and work, which arises from syphilis?—I am sure of that.

6880. In this table that you give us at the bottom of page 6, a number of cases totalling 331, those are cases of old diseases which are regarded as being syphilitic in origin?—As explained at the top of page 7, those are children who came to hospital dispensaries for treatment of conditions which were not frankly syphilitic. They did not suffer from conditions such as the eruptions of congenital syphilis or snuffles. They were cases taken simply to see in how far children with various conditions would turn out to be syphilitic.

6881. Was that an average sample of children of that class?—I should not say an average sample of all children of that class, but an average sample of ill children of that class.

6882. Of sick children?—Of sick children.

6883. All those children came for treatment?—A few of them were relatives of patients; but the majority of them were the actual patients.

6884. (*Sir Kenelm Digby.*) Were they town children; children coming from Glasgow?—Practically all town children.

6885. (*Chairman.*) As a general result of those tests, in 331 cases you got 74 clinical evidences of syphilis and 35 positive and 35 doubtful Wassermanns?—Yes.

6886. Do you consider that as high as you would expect?—That gives an incidence of syphilis in 10 per cent. In confirmation of this result I will quote the figures of the cases of a worker, not in our laboratory, but at the laboratory at Ruchill Hill Fever Hospital in Glasgow, who applied the test by our method to children suffering from whooping cough and measles, and he obtained from 127 children who were unselected as regards history, and who were not clinically syphilitic, a positive result in 8.5 per cent.

6887. Those were ordinary children who simply had these ailments?—Yes; there again poor children. The independent result confirms very definitely the figures already quoted, and places the incidence of syphilis at somewhere about 8 to 10 per cent.

6888. The net result of the 331 cases as summed up by you is 10 per cent. syphilitic on clinical evidence and as the result of the Wassermann test; 22 per cent. have a syphilitic association on clinical grounds, with confirmatory evidence from a doubtful result of the Wassermann test in 4 per cent. That leads to a total in which there was evidence of syphilis of 14 per cent.?—A total of 14 per cent.

6889. Now we turn to mental deficiency and epilepsy. The Commission have the very useful paper of Dr. Kate Fraser and Dr. Watson, and I think those figures are exceedingly important and that we ought

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to get them on our notes. All those cases were treated with the Wassermann reaction?—Yes, all of them. I would emphasise that these results, which show a higher incidence of syphilis in such cases than the figures of other observers would indicate, have been obtained by examining the cases at an early age. As has been pointed out, if one waits till a later period, the evidence of syphilis is not so readily got.

6890. Those results are cases of mental defect only, 51 per cent. positive; mental defect and epilepsy combined, 45 per cent.; mental and physical defect, 41 per cent.; and epilepsy only, 40 per cent.; or a total from 204 cases examined of 46 per cent. giving positive reactions?—Yes.

6891. You regard those figures as important?—I regard them as very important.

6892. As an indication of the extent to which syphilis is associated with mental defects?—They are very important in that connection.

6893. There was no history of the family obtained by Dr. Kate Fraser and Dr. Watson, I suppose. These are isolated cases. They were not able to look into the families from which these children came?—The families have been investigated in a certain number of instances which are mentioned just beneath the table already quoted.

6894. Will you tell us about those?—The examination of other members of families gave confirmatory evidence through the occurrence of positive reactions in 21 instances. In addition, the presence of syphilis in the families of 21 cases which themselves gave a negative or doubtful reaction was proved by the occurrence of positive reactions in other members, and five of the six negatively reacting cases of epilepsy had positive reacting relatives.

6895. Then you come to the conclusion that syphilitic infection was shown to be associated with 59 per cent. of the cases in all. That is, taking cases in which the family was involved?—Yes.

6896. You lay down that those results in the epilepsy form show that the syphilitic character of such cases is best determined at the early age, and that the percentage of positive results rapidly diminishes after the sixteenth year. Does that mean that the disease may fall into the latent stage after the sixteenth year?—It passes into the latent stage.

6897. That is congenital syphilis we are talking about now?—Yes.

6898. And after that it passes into the latent stage, and may possibly escape detection?—It may escape detection.

6899. These cases of epilepsy taken from the Gartloch District Asylum seem to give a much less percentage of positive reaction. Can you explain that?—These are adults.

6900. These were adults?—Yes.

6901. Which bears out that view?—Which bears out that view. It was Professor Dean, of Sheffield, who put forward that view.

6902. Then Drs. Fraser and Watson show that only 22 of all the cases they examined showed the stigmata of congenital syphilis. That might mean that but for the Wassermann test these cases could not have been established as syphilitic?—From the examination of the individual patients, the presence of syphilis could not have been determined clinically.

6903. Then you deduce that there is an inverse ratio between syphilitic nerve damage and the ordinary somatic manifestations of syphilis whether congenital or acquired?—Yes, that bears out what Dr. Mott has drawn attention to.

6904. But may we take it that in your opinion it is the fact that more than half the cases of mental deficiency, whether epilepsy is present or not, of whatever grade of severity, are syphilitic in origin?—The evidence definitely indicates that.

6905. You also lay down that the type of epilepsy which manifests itself at early ages is mainly of syphilitic origin?—Yes, from these results.

6906. Then turning to heart disease in children, will you tell us what you arrive at from that. These cases have not been published, I take it?—These cases have not been published. Dr. Watson examined 25

cases, 7 of which reacted negatively, 1 doubtfully, and 17 positively. The positive cases ranged in age from 1 month to 3 years. The mothers of 14 positive children and of 1 doubtful case all gave a positive result, and in every instance a positive reaction was obtained with some members of the families of the positive cases. This extremely thorough examination was made because the objection could easily have been urged that one is dealing here with children in a very perverted state of health, therefore other members of the families were examined in all positive cases, and the positive results obtained with other members of the families in every instance definitely established the existence of syphilitic infection in those families.

6907. What class of children were these?—These were again poor children.

6908. Selected out of the hospital as having some heart affection?—They were selected because the clinical examination indicated the presence of heart disease. Of the 7 negatives, aged 3 to 8 years, the mothers were examined in 5 instances, all with negative results; in every one of these cases the mother suffered from acute rheumatism during pregnancy. The results showed therefore that there are two main causes of congenital cardiac disease, syphilis and rheumatism, and the striking feature of the syphilitic type is the mortality. Of the 18 syphilitic cases, 9 died when less than six months old.

6909. I will not trouble you on the question of deafness, because we have the evidence of Dr. Kerr Love himself. Turning to ozæna, you give us figures relating to 52 cases?—Yes.

6910. Will you give us those, please?—Of the 52 cases which showed no definite clinical signs of syphilis, such as necrosis of the nasal bones, in which no syphilitic history was obtained, 16 gave a positive Wassermann reaction.

6911. By no syphilitic history being obtained, you mean that the syphilitic history was not to be obtained from the parents by questions?—These patients are mainly young adolescents, and they themselves gave no history. This work was undertaken in connection with the International Collective Investigation. It is possible that if a very full inquiry had been made into the history of the parents, and so on, clinical evidence of syphilis might have been obtained, but I think that there is always a difficulty in that connection, and the Wassermann reaction gives in many instances by a direct route an objective phenomenon of syphilis.

6912. You do not state the kind of age of these 52 cases. Were they grown-up adults?—They are mainly young adults, but the disease began in childhood in most of them.

6913. Of both sexes?—Of both sexes; but two-thirds are females.

6914. Then as to aortic disease and intrathoracic tumour suspected of being aneurysm, what do you say about those?—46 cases from the wards of the Western Infirmary were examined during the past two years, with a positive Wassermann reaction in 64 per cent. That is a much higher percentage than had been clinically supposed to be syphilitic, although, of course, the association of syphilis and aneurysm has always been recognised.

6915. Those cases were examined and the tests made under your supervision?—Under my supervision, and mainly by myself.

6916. Then you give us a table of a large number of different kinds of nervous diseases, 122 cases in all. Without taking down all these figures, what do you generally deduce from that table?—That is the condition of general paralysis in confirmation of the observations already quoted of syphilitic origin, and that fully 50 per cent. of cases of locomotor ataxy react positively, but that certain other conditions like disseminated sclerosis have only a small percentage of syphilis in their numbers. As a whole, among cases of nervous diseases presenting themselves at a general hospital about 40 per cent. are shown to be syphilitic by the Wassermann test.

6917. In those cases, I think you say later on, a test of the cerebro-spinal fluid was not made?—It was not made.

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6918. If it had been made, the percentages of positive reactions would probably have been much higher?—I think that is so.

6919. Then you arrive at a sum total of 41 per cent. of positives, which is considerable in itself? Then eye diseases. What would you like to say about eye diseases?—In eye diseases, taking certain particular conditions, namely, interstitial keratitis, 37 cases gave 35 positives; further, 22 cases of iritis gave 12 positives, primary optic atrophy with 5 cases gave 5 positives, so that in those conditions the causation is definitely syphilitic.

6920. In all these cases I suppose it was the blood serum which was used?—The blood serum.

6921. If there had been an examination of the cerebro-spinal fluid, would there have been more positive cases?—There is no indication in the literature of cases of that type being examined, and I have no personal experience.

6922. In regard to paroxysmal hæmoglobinuria, you state that you are strongly of opinion that syphilitic infection is present invariably in cases of that kind?—Yes, I think that is right. Of course, this is an uncommon disease; but the important point is that in several cases in children we ourselves observed no stigmata of syphilis.

6923. Then in regard to metritis and uterine hæmorrhage, apart from tumour, will you give us the figures as to that?—Drs. McIlroy and H. F. Watson examined 37 cases of this kind, and obtained 20 positives with positive children in two other cases. I should just like to add that an entirely independent observation recently communicated by Dr. Whitehouse, of Birmingham, to the Royal Society of Medicine, has borne out this result. The general results from the examination of undefined gynæcological cases indicate a very considerable prevalence of syphilis.

6924. Where were those gynæcological cases tested?—They were tested in my laboratory, but the cases presented themselves at the Royal Infirmary.

6925. Then you deduce from that that syphilis is very markedly associated with the more severe degrees of undefined gynæcological ailments in women of that class?—Yes.

6926. You give us some unpublished figures showing the examination of the blood of 104 prostitutes. I suppose you mean they were all prostitutes?—Yes, they were, all of them.

6927. In every instance in their case a positive result was obtained?—In every instance. I saw all the tests.

6928. And would that mean that the whole of those girls were infective?—One or two showed evidence of congenital syphilis; but the preponderating number must have been actively infective, because they were all young, ranging from 14 to 18 years of age, and therefore they must have acquired the infection quite recently. Further, the infective condition was common both to those who were of the poorer class as well as those who were not.

6929. They were of very various grades?—Yes. Half of them were from a very poor district, and half of them were from the West End district. They were all alike in fact, syphilitic.

6930. The results were the same in both cases?—In both cases.

6931. How was this examination of tramps arranged to be carried out?—The bloods were taken by Dr. Watson, who utilised the people in a district in Ayrshire where he lived.

6932. Were these *bonâ fide* tramps going about the country, or were they people moving in order to get work in another place?—They were of the class which we in Scotland call tinkers.

6933. A nomad class?—A nomad class.

6934. Normally so?—Yes.

6935. The results are rather striking. There are 18 families, 85 children, 14 mothers, and 10 fathers, and in every case a marked positive reaction was obtained. That is rather striking, is it not?—It is most extraordinary; it was not anticipated, but the reactions were positive beyond all doubt. A curious corollary is, that among these people syphilis does

not seem to diminish the size of their families. One family consisted of 18 members all positive, and there was another family of nine members.

6936. Does it mean that the syphilitic taint will not produce much still-birth?—Not among these people.

6937. Not much?—No.

6938. (*Sir Kenelm Digby.*) Are the children healthy?—Fairly healthy.

6939. (*Chairman.*) Can you suggest any reason why the phenomenon of still-births should not appear in these cases when it does in so many others?—Unless it be that these people are more accommodated to syphilis than any other portion of the community, I cannot suggest a reason.

6940. Then the great majority of those people were infective besides being infected?—At one period of their lives they must have been.

6941. But not all at the time they were examined?—The mothers must certainly have been infective at the time they had the children.

6942. Then your broad conclusions are, as I think you told us before, that a positive reaction is practically conclusive proof of the existence of syphilitic infection, and that if the test errs it is rather in the failure to detect cases than to record cases which are not true syphilis?—Yes, that is my conclusion.

6943. But coming to your remedies, you lay down that the widest possible routine application should be made by methods of diagnosis. Have you formed any idea of the best way to set about to get that large and broad application?—In addition to making an exhaustive clinical examination it would be advisable to examine the blood of every patient.

6944. Every patient who came to every hospital?—Yes, that is necessary if the problem is to be attacked from the root.

6945. That would mean, of course, a very large extension of existing analytical machinery?—A very large extension.

6946. But you think it would be worth the expense of carrying it out?—I am convinced of it.

6947. In those methods of diagnosis, as you say, you put the Wassermann reaction in a most prominent place?—Yes, it should occupy a prominent place.

6948. Your secondary reform is as regards methods of treatment. All cases of syphilis should be thoroughly treated. Have you had yourself a large personal experience of treatment by salvarsan?—I have, by personal observation, convinced myself of the great efficacy of salvarsan, and I have come to the conclusion that it is possible to do with a single dose of salvarsan what it may take a course of mercury to accomplish, or what a course of mercury may fail to accomplish.

6949. And are the results as durable as those obtained by the much longer period of treatment with mercury?—There is no proof to the contrary.

6950. Anyhow, there is no doubt whatever as to the much greater rapidity of the results obtained?—Results are in general obtained with much greater rapidity. I know of cases in which lesions that had persisted in spite of mercury for months, have been healed within a few days after salvarsan—for example, syphilitic throat conditions.

6951. That does not prove, does it, that that same patient might not at a later stage become infective again?—No, that is not proof.

6952. Do you hold that all hospitals should be prepared to treat these cases in the early stage?—I think they should.

6953. At present you say that cases of acquired syphilis are mostly treated in the out-door department with pills, powders, or mercury solutions. Do you think that all cases in the early stage should at once be capable of being taken into the hospital and treated with salvarsan?—That would be right.

6954. And that only a period of two days on five or six occasions would suffice for the salvarsan treatment?—I suggest two courses of that kind, combining this treatment with very thorough mercurial treatment.

6955. But having begun this treatment, it is essential that the patient should go right through with it, is it not, or else he may relapse, and become

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a danger to the public again?—Yes, and that is true of the early cases especially.

6956. Do you say if complete sterilisation has not been effected, a recrudescence with renewed infectivity would occur? The great difficulty you say centres in the question as to how treatment is to be enforced. Have you thought out that difficulty, and are you prepared to make any reasoned suggestions?—It seems to me it will be the great service of this Commission to make these suggestions.

6957. We want as much help as we can get. You are quite clear, at all events, that we should endeavour to disseminate accurate knowledge as widely as possible?—Yes, and to remove the stigma that attaches to the disease in so many people's minds.

6958. I do not know any way of removing the stigma except giving greater publicity?—Yes.

6959. If the public accepts the fact of the large extent of these diseases, do you think the stigma would be thereby reduced?—Yes, I think so. Anything which is very general ceases to be a stigma.

6960. I take it your mind inclines rather to making the disease notifiable at some later stage?—Yes; I think that at present what has been suggested to you by Dr. Kerr Love regarding what he calls a flank movement of notification would be good, since it would lead to the detection of syphilis in families, and, by leading to treatment, prevent or diminish the occurrence of further congenital syphilis. To me personally the notification of primary syphilis seems to present very great difficulties, although I think hospitals should maintain a firm hold of those cases that come under their notice.

6961. Would you make that compulsory—that if a patient had been detected as having the primary disease, he should then be forced to go into hospital till he has completed his cure?—I would suggest that the authorities in the hospital should say, “If you will not treat yourself, or allow yourself to be treated as we would like to treat you, then we have a further power.”

6962. You are not afraid if it was known that power was hanging over people, they would not go to hospital at all?—I think what I have suggested puts the question of notification at the present moment in perhaps the least objectionable way. Of course I think that the dissemination of knowledge is the most important thing just now.

6963. Having detected the disease at a curable stage, would you like to have the power of saying that that case must go through to the end?—I should like the power, but apart from hospitals I do not see how we can enforce it.

6964. I quite agree with you. You object, I see, to special hospitals being created, or special wards. Would you rather take the patients suffering from these diseases in the ordinary ward as far as it could be done without injury to the other patients?—Yes, at present.

6965. Of course you are aware, as regards the educative measures in the army, and the good effect which has been produced in the army, that that is entirely due to the use of force?—Yes.

6966. You think public health authorities might be enabled to supply salvarsan free of charge to the practitioners. You would be very careful, would you not, that the salvarsan treatment should not be given by practitioners who were not thoroughly up to the technique of it?—Practitioners could easily receive the special instruction. The administration demands a certain amount of nicety in the performance.

6967. But also a certain amount of discrimination based upon the state of the patient, does it not?—Yes.

6968. The danger would be, would it not, that if salvarsan was handled by inexperienced persons, you would get a number of deaths from it, and people would be frightened out of their senses, and never take it again?—Certainly it is a potent drug; but the result of a very large number of administrations has proved it to be safer than chloroform, for example, of which the public has no great fear

6969. But at least there should be as much medical instruction as is necessary to enable these general practitioners to use the drug?—That is very important.

6970. And if they have that, the drug should be supplied to them free on demand, by the State?—Yes, because the price of it would be a very serious matter to poor people. The price of a full dose is ten shillings.

6971. In the meantime you say some form might be devised for coercing those who are aware that they are suffering from the disease, and do not submit to thorough treatment. What form might be devised?—I understand that the Public Health Authorities have various forms whereby they can annoy people who will not submit themselves. Dr. Newsholme could inform you on that point. I am not an authority on these matters; but I understand, for example, that if a small-pox contact will not isolate himself he can be made to feel very uncomfortable, and his means of livelihood may be interfered with for the time being. Under the head of the Infectious Diseases Act, some procedure might be put into operation.

6972. But you would make it as uncomfortable as possible for anybody who having been told plainly face to face what he has got, after that refuses to be treated?—Yes, I would, in view of the danger to the community as well as to himself.

6973. Have you had any experience of the incidence and effects of gonorrhœa?—I have had no special experience.

6974. Have you formed any opinion as to the effect of alcohol upon syphilitic patients or upon the course of the disease?—On general principles the combination of alcohol and syphilis must be bad.

6975. You have not had the treatment of alcoholic patients?—No; no severe alcoholic cases.

6976. (*Sir Kenelm Digby*.) I was very much struck with the instances you gave on page 2 of this paper. First of all you give the case of a man who was treated with mercury for about six months after infection and then remained perfectly healthy for 25 years, but after 13 years infected his wife. In that case he considered himself, and, I suppose, with the state of knowledge at the time he was probably justified as considering himself, as cured after six months' treatment of mercury and having no further symptoms?—He certainly was not aware of any manifestations of the disease.

6977. And he would think himself cured probably and perfectly free to marry without any danger?—I think so. That particular man was a very considerate man, as far as one could judge from conversation with him. He was much distressed at the later date concerning the results of his actions.

6978. Would you call that a very exceptional case or is it a case that may happen oftener?—I have no experience to answer that precisely; but it shows what may happen.

6979. Have you come across other cases yourself of the same character?—I have come across no one so extreme as that; but Hochsinger, of Vienna, relates a case where infectivity persisted for a long period. The first child was syphilitic, and both parents denied any knowledge of syphilis. The second conception occurred 18 years later, and the second child was also syphilitic. The parents were not treated in the interval, and neither showed any evidence of the disease. This shows what may happen if the disease be not properly treated.

6980. Take the other case, which is almost as striking, I think. You say, “I have seen a case of ‘tabes with rapidly progressing optic atrophy occurring in a highly intelligent and well-informed man who had never, to his knowledge, presented any of the earlier signs of syphilis, although he volunteered the history of exposure to possible infection.’” That seems to show that a man who has once exposed himself to infection may have no conception that he has contracted any disease, and yet, nevertheless, even at the very latest stage—I am right in supposing that tabes comes very late?—Yes.

6981. It breaks out then for the first time?—Yes. I think that is not so uncommon as has been supposed.

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6982. Then that man again would marry without the slightest apprehension of any danger?—Yes.

6983. Does that not point to the necessity, if possible, wherever there is even so remote a risk as there seems to be in a case like that, of endeavouring to secure some evidence before he marries, whether he can do so safely. With the present state of knowledge you think that is possible?—That is distinctly possible.

6984. Is not that to be aimed at with regard to any person who knows he is in that condition?—I believe some such measure has been adopted in America in certain places already. It all depends, I suppose, on how sympathetic people are towards their own future health, and that of their offspring.

6985. I suppose the first thing to do is to get it generally known there is this danger which a great many people do not suspect?—I think that ignorance in many cases is responsible for neglect.

6986. There is no way of bringing it home to them at present?—No. I have been struck by some instances I have met with as to how considerate men are in that respect; they earnestly desire to assure the future health both of their wives and their offspring.

6987. But if I understand rightly, there is a simple method of attaining all this practical certainty as to whether there is any danger or not?—In about 50 per cent. of cases.

6988. I mean, given a lapse of time, and given proper treatment, you can for practical purposes ascertain whether a man may safely marry or not, in plain language?—Yes; but I would not like to convey the idea that the Wassermann reaction and infectivity go along with one another; that is not the case. A tertiary syphilitic is in most instances practically non-infective, and yet in 75 per cent. of cases he reacts positively.

6989. (*Sir John Collie.*) Will you explain to the Commission what you mean by "tertiary"?—Tertiary syphilis is the form of manifestation that comes on after a number of years of apparently good health succeeding the primary and secondary stages, and in which the lesions is of the nature of local conditions, not general eruptions, and which do not tend to heal so spontaneously as a rule.

6990. (*Sir Kenelm Digby.*) You say the Wassermann test would not insure complete safety at all events?—No.

6991. If you get a negative Wassermann, you could not insure he was not still in an infective stage?—No. A positive reaction would also not invariably mean infectivity. A positive Wassermann reaction means that the individual is the subject of syphilitic infection, but it does not necessarily mean that he would be highly infective to others.

6892. Therefore it would be a too rigid test to apply in such a serious matter as the question of the capacity or propriety of marriage?—Yes, except that a positive result always points to the danger of future damage to the patients' own health.

6993. Do you think that means of imparting that knowledge, which seems to be so essential to men generally, and women too for that matter, can be very largely added to and improved now? I mean, to make men realise more than they do at present what the dangers are?—I think there is the possibility of great improvement in that direction.

6994. Have you considered the point? If you have not I will not ask you. Would you put any restriction whatever upon marriage, or make it in any way a legal obligation to take steps to ascertain whether the man is fit for marriage or not, either directly or indirectly, either by affecting the marriage contract or possibly proposing some procedure or judicial separation, or something of that sort, if it were recommended by the Commission?—I think any means which would lessen the chance of congenital syphilis should be taken.

6995. Really the question is whether it can be practically effective or not?—Yes, I think it can be made practically effective to a great extent.

6996. (*Sir Almeric FitzRoy.*) I gathered from a reply you made to the Chairman, that your investigations have been confined to syphilis?—They have been.

6997. But are you aware, as a matter of common medical knowledge, whether any researches are being conducted in this country which have for their object the better cure of gonorrhœa. Is it a subject of investigation at the present time?—I am aware of attempts that have been made, but I am not aware of anything specially satisfactory.

6998. There is not a satisfactory result?—I am not aware of it.

6999. Are you familiar with the name of Mons. Laveran, the discoverer of the parasite of malaria?—Yes.

7000. Are you aware of the communication made by him to the French Academy of Medicine as to the work done at the Pasteur Institute of Tunis, from which they expect to provide as effective a means of curing gonorrhœa as Ehrlich has done for syphilis?—I have no knowledge of the work.

7001. But have you heard of any such communication being made to the French Academy of Medicine?—No.

(*Sir Almeric FitzRoy.*) I believe it is so. You have heard of it, Mr. Lane?

(*Mr. Lane.*) Yes.

(*Dr. Arthur Newsholme.*) Have you tried this particular treatment?

(*Mr. Lane.*) No; I do not think it has arrived in this country. I do not think it has arrived in Paris yet.

7002. (*Mr. Lane.*) Most of your work has been in the laboratory, and your principal work has been in blood tests, I think?—Yes.

7003. Have you a great clinical experience of syphilis? Do these cases of syphilis come under your immediate observation?—There was such a large number of cases that it would have been impossible for one man to carry out the complete investigation. It has only been by collaboration that we have been able to carry out the work.

7004. You say, "With regard to the signs of active disease it must be borne in mind that practically no infective condition invariably presents characteristic clinical appearances." Would you say that applied to syphilis?—I believe that applies to syphilis as to all infective conditions. The whole modern tendency and the results of scientific research has been to show that typical manifestations only represent one end of the scale. My work on immunity during the past 11 years has proved that to me quite definitely.

7005. So that you would not say there was any characteristic clinical appearance about syphilis?—I do not wish to convey that. I know that the so called typical appearance of the disease is very characteristic, and could not be mistaken by the trained man.

7006. And have you come across many typical cases, cases with clinical symptoms, in which there is any difficulty in diagnosing the disease?—I would point out that the first case I treated with salvarsan was a boy, who for many years had been treated as tubercular. He had been a hospital patient. It was a case which Dr. Edington, of Glasgow, published along with me. The boy was aged 16. At four years of age his eyes became affected, and he had a limp. The case was taken to be tubercular, and he was treated on and off for years. It was only ultimately when the patient was 16 years old that someone thought of looking at his teeth, and then suspected syphilis; I tested his blood for the Wassermann reaction and confirmed the suspicion.

7007. But the teeth in that case were not examined for a long time, and the eyes appeared to have been not particularly regarded. It seems to me that that is a case which might easily have been diagnosed sooner. You gave us to understand that clinical observation of syphilis is rather of secondary importance to laboratory investigation?—No, I did not suggest that. Where the clinical manifestations are typical, they are quite convincing, but cases which the trained clinician finds to be doubtful are not uncommon, in such cases the Wassermann reaction can collaborate with clinical work, and I think can help it to a very great extent, and can convert suspicion into certainty.

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7008. In a certain number of cases. Looking at page 6 at those 331 cases, there are 74 in which there was clinical evidence of syphilis, and only 35 in which the Wassermann test was positive?—Yes.

7009. It appears there that the clinical evidence is more than twice as valuable as the laboratory investigation?—I do not agree with that. In the first place, it is stated clearly in my paper that these cases were attending hospital for the treatment of conditions which were not frankly syphilitic. Further, clinical evidence depends to a very considerable extent on the man who is observing, whereas the Wassermann reaction is an objective test by which anyone can be convinced. The standard can be definitely fixed. The clinical standard may be varied immensely.

7010. Do you have much experience of the diagnosis of early syphilis, for instance a sore of a doubtful nature? Are they sent to you?—Yes, I see those cases.

7011. And you examine for the spirochæte?—Yes. I do.

7012. Would you give a positive diagnosis in the absence of a spirochæte?—The failure to find spirochætes does not necessarily exclude syphilis. I have an example bearing on that of a young medical man who was resident assistant in a hospital. He had a doubtful lesion on his finger of a chronic nature and of indeterminate character in which no spirochætes were found after careful observation. He then passed out of my observation; later on, in spite of developing very characteristic evidence of syphilis, his hospital associates considered he did not have the disease, and were not convinced until a positive Wassermann reaction was ultimately obtained. He suffered very great damage to his health.

7013. So that the absence of the spirochæte is not of any convincing diagnostic value?—Not where a primary lesion is in process of healing.

7014. You say there are no facilities for students to see cases of syphilis in Glasgow; but we have heard it is very prevalent there, and there must be an enormous clinical field in this direction in Glasgow?—If it were organised I think there would be.

7015. But at the present moment there are no facilities for students to see cases of syphilis?—There is a lectureship on syphilis at the Royal Infirmary, but beyond that I do not know of any systematic practical instruction.

7016. And you say there are no facilities for early treatment in Glasgow. I presume you mean there is no method of administering salvarsan in early syphilis?—There is very little hospital facility.

7017. Then you talked of the carrier stage of syphilis, after the disappearance of the first and secondary stages, when the lesions are slight. This carrier stage is a new term to us here. What stage would it be considered in ordinary medical parlance?—The early latent stage.

7018. Then you say, "An early syphilitic in the early lesion stage, though apparently healthy, is a source of great danger to others." How is he a source of great danger?—Because he is infective.

7019. But how? He is apparently healthy; he is free from any syphilitic lesion?—He must harbour spirochætes in sufficient numbers and cast them off.

7020. But how is he going to cast them off to somebody else? I cannot understand how he is a source of danger. He has no lesion on his body. There may be spirochætes; but how are they going to escape from him into somebody else?—Certainly, the man will be capable of infecting his wife.

7021. Yes certainly?—And although not proved, it is probable that the saliva may also carry the infective agent.

7022. I think not. If the saliva is an infective agent, you would expect the semen to be. Is that the case?—Semen definitely now has conveyed syphilis,

7023. But how has it conveyed syphilis—only by infection of the mother?—When I say conveyed syphilis, I mean has been proved infective beyond all doubt in animal experiments.

7024. You mean to say it could be inoculated into an individual and would produce a primary sore?—Yes.

7025. The semen from a patient in this condition of what you call latent syphilis. Then coming to the top of page 6 you say it is proved that "many cases of interstitial keratitis do not respond to anti-syphilitic remedies, even when most energetically applied." You would say then that interstitial keratitis was not amenable to treatment?—In many cases interstitial keratitis prove refractory even when treatment is commenced immediately on the appearance of the lesion. I know of course that other cases recede, whether as the result of treatment or spontaneously.

7026. But there are a large number of cases of interstitial keratitis recover completely, and the cornea shows no evidence of pre-existing disease?—I understand that; but it is considered to be economically a very serious affection, is it not?

7027. I should say these cases that did not respond were cases in which opacity of the cornea was left from the inflammatory condition and that they would obviously not respond, but if they had been treated earlier they might have?—That does not appear to be the general experience. In one case that I know of definitely, a lesion in the second eye, started during the course of energetic treatment.

7028. And did not yield to that treatment?—And did not yield.

7029. With reference to the ozæna, you say there were 52 cases in which no syphilitic history was obtained. Would you give a definition of ozæna to the Commission? I am not sure that they are all conversant with the term?—Ozæna is a condition in which the feature that strikes any observer, trained or otherwise, is the presence of a fetid nasal discharge.

7030. The term "ozæna" merely means a stinking discharge?—Yes, and there is an atrophy of the turbinates—the bones in the nose—and the mucous membrane covering which accompanies that. But it is the stinking discharge which makes the condition of the patients so miserable.

7031. But the vast majority of these cases would be recognised clinically to be syphilitic. I mean it is an uncommon occurrence except in syphilis?—The clinical observers who had these cases under their charge were men of long experience, were surprised at the results of the Wassermann test, all cases in which there was clinical evidence or a history pointing to syphilis were excluded from this examination.

7032. Coming to page 11 with reference to metritis and uterine hæmorrhage, you say that these results at the Royal Infirmary suggest that "syphilis is very markedly associated with the more severe degrees of indefinite gynecological ailments in women of this class." But women of that class are equally if not more liable to gonorrhœa; is not that so?—Yes, they are also liable to suffer from gonorrhœa.

7033. And is it not the inference that gonorrhœa is much more likely to account for these cases of metritis and indefinite gynecological ailments than syphilis? I do not see that it is conclusive evidence against syphilis as a cause of metritis. In the discussion which arose on Dr. Whitehouse's paper at the Royal Society of Medicine certain observers recorded very satisfactory results with anti-syphilitic treatment.

7034. What was the anti-syphilitic treatment?—It was mercury that was spoken of.

7035. We all know that mercury is the drug that is usually given in these cases with inflammatory conditions in the pelvic organs. That is the drug that one could at once resort to. Coming to the social conditions associated with prostitutes, you say: "It is obvious, apart possibly from a certain proportion of congenital cases, infection must have taken place recently, and therefore all must have been in a highly infective state." Were they proved to be in a highly infective state? Were their genital organs examined, or was it only the blood?—Only the blood. From the fact that these girls had only belonged to that class for a short time, and therefore must have

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become infected recently the inference regarding infectivity is drawn.

7036. I see that you would recommend that the blood of every patient coming to every hospital should be examined as a routine. Is that not rather a serious proposition?—It certainly would involve a great increase in work. But I take it that an attempt is now being made to deal with syphilis as widely as possible, and I think that such universal examination is right.

7037. But this is making the treatment very wide. Do you think it might repel people from hospitals?—Do you think a mother with a newly-born child, if she knew that child was going to have some blood taken from it, would defer her visit to the hospital?—As a whole I do not think the people resent that operation greatly.

7038. Then you recommend five intravenous injections with salvarsan, with a period of two days in hospital for five injections?—I think two days would work out as an average period.

7039. Are you aware that in Paris the patients do not remain in hospital, but they are sent straight away from the out-patients' department?—I think that procedure would be inadvisable, because a dose of salvarsan, even when correctly administered, may cause considerable temporary disturbance of health.

7040. In my own hospital they are only kept in for three or four hours, and they very seldom describe any discomfort. One question as to the price of salvarsan. It appears to be rather higher in Glasgow than it is in London. At my hospital 6s. is the price for the maximum dose of neo-salvarsan?—I do not deal in the drug. I was simply quoting what I have seen as the figure on the price list. I know that hospitals get a reduction; but either price, 6s. or 10s., may be serious to a poor person.

7041. You say that "no good object would be served by the existence of special hospitals, or even of special wards for such cases, since any measure tending to stigmatise the individual will, by leading to concealment, interfere with thorough treatment, and thus conduce to the further spread of the disease." Then you are against the existence of such a hospital as the London Lock Hospital?—If such a hospital can justify its existence, it is good. But I am afraid a number of people may be discouraged by knowing they are going to be labelled syphilitics.

7042. But if I told you that there were nearly 40,000 visits of different patients there in 1912, would you say that it did not justify its existence. Would that alter or modify your opinion?—Certainly so far as London is concerned I consider that is a most encouraging result. But one fears that a number might be discouraged; and so far as I know, in Scotland the lock hospitals have not dealt very thoroughly with syphilis.

7043. They have not dealt very thoroughly with syphilis, and therefore the syphilitic patients have not applied to them for treatment. You advocate free salvarsan to practitioners. Of course you have seen many doses of salvarsan administered?—Yes.

7044. But always by an expert—somebody who is in the habit of giving them constantly?—Yes.

7045. Do you think there is any difficulty in the technique?—In most cases I think it is moderately easy. But I would not suggest that any man who had not received a course of special training should administer it. I do not think many men would be anxious to.

7046. The danger is not from the salvarsan but from the faulty technique as a rule. I think you would agree that most of the fatal accidents are not from the salvarsan itself but from some fault of administration?—Yes. But I do not think it would be good that the idea should obtain prevalence that a serious result was *ipso facto* due to negligence; because I have seen grave illness follow a dose of salvarsan where I have myself taken every precaution.

7047. But the cases of death following almost immediately after the injection, say within 24 hours, are not due to arsenical poisoning but the faulty technique,

and probably the injection of air into the veins?—Or an anaphylactoid condition.

7048. But have you seen anaphylaxis produce death?—I have seen, in a tabetic, a very serious condition of this nature.

7049. (Dr. Arthur Newsholme.) Do you mind explaining "anaphylaxis"?—I say "anaphylactoid," in the case of salvarsan, because I am not convinced it is the same thing. But anaphylaxis is a condition in which the introduction into the tissues of a substance causes serious results when previous introductions had caused little or no ill effects. To give the classical example. A guinea-pig will tolerate the injection into its peritoneal cavity five cubic centimetres of horse serum, and will not be affected in its health at all; but if you give it a dose of horse serum—a very small dose would do, one-tenth of a cubic centimetre—and after a suitable interval of, say ten days, give it a further dose of two cubic centimetres, that guinea-pig will in many instances die in a few minutes. The first dose has produced an alteration in the animal's reacting power, and to this altered state the term anaphylaxis is applied. Now, in the case of salvarsan treatment, especially in patients affected with the parasymphilitic conditions, when repeated doses are given, one may find that the reception of a dose which has been borne well before will cause grave illness. I have seen a case of that kind. The man was the tabetic with optic atrophy referred to in my paper. He had received five doses, which had not upset him more than may often happen, and he received the sixth dose quite comfortably until towards the end of the injection; that is to say, air entering the veins was not the cause of the phenomenon. Just at the end of the injection he complained of feeling very ill; I need not describe the condition in detail; but the man's statement afterwards was that he felt as if he were going to die. For a quarter of an hour or thereabouts he was seriously ill. Mr. Ernest Lane's experience is much beyond anything I can claim to, but I suppose that the condition which I have described is very rare.

(Dr. Arthur Newsholme.) In order not to give a wrong impression, it would be a good thing to elicit from the witness whether this phenomenon is a common or rare one in regard to salvarsan.

7050. (Mr. Lane.) Will you answer that, please?—Professor Ehrlich's own letter to me in regard to this case stated that this phenomenon was to be watched for in parasymphilitic cases; but the general experience is that in the early stages it is not to be feared.

7051. (Sir John Collie.) It is not a common condition?—It is not a common condition.

7052. (Mr. Lane.) Are you in the habit of treating these cases of so-called parasymphilis, nerve syphilis, with salvarsan?—I have treated such patients at their earnest request, and because nothing else offers a hope. The general experience, of course, shews that it is very difficult to benefit those cases at all.

7053. And is not Professor Ehrlich definitely antagonistic to treatment of these cases of parasymphilis by salvarsan?—He would not recommend it; but he did give his advice—

7054. Which was definitely against it?—He recommended the procedure to be followed in case such patients desired to be treated.

(Mr. Lane.) That is all I have to ask.

7055. (Mrs. Creighton.) With regard to these 104 prostitutes that you examined, how were they got hold of?—I do not know that. Dr. Watson, who obtained the cases, has a talent for sociological investigation.

7056. So that you cannot tell us whether they came for treatment because they knew they were suffering from illness, or whether he just found them?—65 of the cases submitted themselves under the impression that they were going to receive a form of treatment.

7057. And, therefore, it probably was because they were conscious that they were suffering from disease, or they would not be anxious for treatment?—That is true; but the other 39, that is over a third of all the

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cases examined, come under notice quite apart from any desire for treatment.

7058. But of course the value of the experiment would very largely depend upon whether those were girls presumably healthy or girls who knew they were diseased?—Thirty-nine cases either denied venereal disease altogether, or were unaware of having suffered from such, although seven of them gave clinical evidence pointing to syphilis. None of these 39 cases showed any signs of congenital syphilis.

7059. I suppose you would feel convinced that prostitution is the great source of this disease?—These girls were all prostitutes, and most of them must have been actively infective.

7060. That is not answering my question. Have your studies convinced you that the source of this disease is to be sought in prostitution?—I do not think that the whole source can be that, if you take the dissemination among tramps and among the poorer classes; but prostitution must be a very prolific source of syphilis, judging from the fact that all of these girls had only been so engaged for a comparatively short time, as their ages, 14 to 18 years indicate.

7061. Can you tell me at all how these tramps were got hold of? Was it by the same gentleman with this special talent?—Yes, by Dr. Watson, in a district in Ayrshire.

7062. Because we asked a witness a little while ago as to the English Unions, whether this disease was prevalent amongst tramps and he said not specially. Your conclusion here would look as if it were?—The results which I quote point to syphilis being exceedingly prevalent among this class; but the cases were not seen in connection with an institution. These were mainly cases passing through the district, and they were taken privately.

7063. They did not know they were ill; they were persuaded?—They were persuaded; it was quite apart from complaint of illness.

7064. From their having any illness?—Yes.

7065. I gather you wish it should be possible to take a blood test from all people in hospitals. From what point of view? Is it from the statistical point of view that you desire that?—That would not be the only benefit. The benefit would be to detect syphilis where present and to provide an opportunity for treatment, because I feel sure syphilis must exist where clinicians who have not had a considerable experience of the disease would not suspect it.

7066. So your desire would be to follow up the examination by cure?—I think that is the indication.

7067. Then you suggest in your paper that school children should be examined in the same way during the medical examination. You think it desirable during the medical examination of school children as at present in force that the blood test should be applied to all the children?—I think it should. It is not a procedure that is very painful or at all dangerous.

7068. Of course, it would add enormously to the expense of the medical inspection?—Yes, it would involve considerable expense.

7069. Then you also expressed your desire that cure should be enforced on hospital patients?—I merely suggested that one has got some hold on a hospital patient in virtue of his having presented himself at a hospital, and that such an opportunity might be utilised to enforce treatment.

7070. Of course, if it could be enforced on hospital patients and not upon other people, it would be distinguishing between the poor and the rich, would it not?—Yes, I am quite aware of that.

7071. It would have that disadvantage. Have your observations led you to believe that any test can make it absolutely certain that a man who has once had syphilis may not pass it on to his family?—No test can make that absolutely certain.

7072. Then it cannot be made absolutely certain that he may not pass it on?—Here, again, I speak of what is not my special province, but it is known that efficient treatment diminishes infectivity to the vanishing point. Is not that right, Mr. Lane?

(Mr. Lane.) I think so, certainly.

7073. (Mrs. Creighton.) But you give these cases where it has shown itself again in a most unexpected way after a long period of years. Would you explain that by saying they had not had adequate treatment?—That case certainly was not adequately treated. The course of mercurial treatment usually recommended is two years, and Mr. Lane recommends five to seven years.

(Mr. Lane.) I did.

7074. (Mrs. Creighton.) So that, therefore, these cases where the infection appeared in such an unexpected way were cases which had not been properly treated?—Yes. I may add that I believe the number of people who do treat themselves properly must be very small. I know of a case of a medical man who was accidentally infected on the finger, and who naturally was anxious about himself. He had been taking mercurial treatment for five years, but he reacted positively to the Wassermann test at the end of that time.

7075. Then that man could not safely marry?—That is not a point on which I would express a definite opinion.

7076. (Mrs. Scharlieb.) I think we understand that if the treatment with salvarsan and mercury is properly carried out, and the results verified from time to time by the Wassermann reaction, we can hope for a practical cure?—I think so.

7077. And practically annihilation of infectivity and freedom for the individual?—Yes.

7078. (Mr. Philip Snowden.) Am I right in assuming, from what you have said, that the Wassermann reaction is practically an infallible test of the presence of syphilis in the body?—A positive reaction indicates syphilis and nothing else in this country, I am convinced; but a certain number of syphilitics at certain stages will not react positively. The test depends on some biological alteration of which we are quite ignorant, and no biological phenomenon is universal. The main point is that the non-syphilitic does not react positively.

7079. What checks or tests have you made to form the conclusion arrived at like that by the Wassermann test?—I take it that the cases investigated as thoroughly as cases can be, clinically, have shown such a good correspondence that one may then say in an unknown case the positive reaction as the basis of our experience means syphilis.

7080. But a great many cases that show a positive reaction are the cases of men or of persons who are apparently in a good state of health?—Yes, quite a number.

7081. Does not that seem to point to the conclusion, then, that the presence of syphilis in the body is not a very serious matter, to that particular individual at any rate?—No, that is not necessarily the significance, because it is well known that people who have suffered very little from the early syphilitic phenomena may become general paralytics. The general paralytics are recruited in great part from people who have had light syphilis so far as the early phenomena are concerned.

7082. But you state at the beginning of your paper that there are cases where the infection is so very slight that the individual himself is never really aware of it?—So far as early phenomena are concerned; but that does not mean that those cases will not suffer at a later period from very serious manifestations.

8083. He might do so?—He might, and does in a number of cases.

8084. But are there not a great many cases where a person has been infected and no serious consequences ever ensue?—There must be; but I take it that the aim of treatment is to prevent the occurrence of serious effects in those cases which, if untreated or insufficiently treated, would at a later date present intractable manifestations of the disease.

8085. But you mention here cases where, as I said just now, the individual himself has never been aware of the infection, and therefore he cannot have undergone treatment. Are we to assume that in every such case there will be later serious manifestations?—Not in every case.

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7086. But in a fair proportion of cases?—I think it is impossible to say how many. That remains to be determined to a great extent by further investigations.

7087. If there be no later manifestations, how can you conclude he ever was infected?—I do not know; but what I would deduce from the case already mentioned is that if that man had had his Wassermann reaction tested at an earlier period, there is a very good chance that he would have been detected and could then have been treated, and the earlier treated the greater the chance is of preventing later manifestations. Syphilis is not a disease in which one can intervene at any stage with equal effect.

7088. You have been questioned already on a rather remarkable instance you gave of a man who conveyed infection after a period of 13 years. I suppose it is right to assume that during those 13 years there had been no manifestations of the presence of syphilis in that man's body?—He was aware of none.

7089. So that that is a case which rather supports the idea that it may be possible for what I might call the germs of syphilis to be in the body without any outward manifestations of that form of disease?—Yes.

7090. May I sum up the whole point by putting the question in this form. Are you really convinced that syphilis is a contributory effect or the primary cause of other diseases to the extent to which we have been led to believe by the evidence which has been given before this Commission?—Do not you mean other evidence beyond mine?

7091. Yes. I suppose you have read the evidence?—Yes. Without replying in detail, I would say that syphilis is very closely associated with certain diseases, and one cannot escape the conclusion that it plays a part, and a great part, in the causation of them. For example, aneurysm. In certain other diseases I think it plays the exclusive part; for instance, general paralysis and interstitial keratitis, also it plays a great part in the causation of mental deficiency.

7092. Do you mean to say that all cases of general paralysis are due to syphilis?—I would say, undoubtedly yes.

7093. You gave statistics which had been collected in one of the Scotch Poor Law asylums where about 20 per cent. of persons who did not suffer from general paralysis were found to be syphilitic. Would you conclude from that that the form of insanity from which these persons were suffering was due to their syphilitic condition?—I would not conclude that. I merely mean that it is part of the symptom complex of the insane.

7094. May I put the question like this. I will put in another form the question I have put to you differently already. You think that a very large number of diseases would be eradicated altogether if syphilis could be destroyed?—I think that syphilis is so widely associated with the hospitalised portion of the community that it must play a very important part in the conducing to ill-health and to serious ill-health.

7095. You do not think there is a danger that medical men jump too readily to conclusions: that they find the presence of a certain thing in the body and they at once jump to the conclusion that that must be the cause of certain phenomena that manifest themselves?—I should think that syphilis had probably been under-rated rather than over-rated.

7096. But is the opinion which is held by medical men generally as to the influence of syphilis upon other diseases an opinion which was held by them 10 or 20 years ago, say 20 years ago?—I am not competent to speak of that period; but the attention which is focussed on syphilis undoubtedly leads to its being detected now where it was not suspected before. Take that condition, which is a rare disease but is striking as evidence of syphilis of paroxysmal hæmoglobinuria. That is a condition which was of practically unknown origin. It is a condition in which the person exposed to cold passes urine containing the colouring matter of the blood. I have little doubt that syphilis is invariably associated with that condition, and it is only owing to the interest attaching to

syphilis through the Wassermann reaction that proof of syphilitic origin was obtained.

7097. Would there be any truth in the statement that it is only within the last year or two, or, perhaps, only within the last few months, that the medical profession has awakened to the importance of syphilis as a contributory factor in general diseases? Do you mean during the last few months in this country?—You suggest that this Commission has stimulated these inquiries. The investigation which I have been concerned with was not stimulated by a prospect of the Commission. As I said, I was led to investigate the question because the work on hæmolysins, the scientific work on the factors in serum which are concerned with making of blood, was applied by Wassermann and his collaborator, and gave this test which is of such signal value. Secondly, there was the previous discovery by Schaudinn of the spirochæte, which also enabled the presence of syphilis to be diagnosed by a very certain method. These two discoveries stimulated the inquiries into syphilis, which have already born valuable results. I should regard the Commission as probably the outcome of these discoveries together with Ehrlich's discovery of salvarsan.

7098. You made a statement that was of a similar character to the statement that was made by Mr. Lane when he was giving evidence before the Commission, namely, as to the ignorance of the general practitioner on this question of syphilis and venereal diseases. I think you stated that there was practically no facilities at all in the medical schools in Glasgow for teaching students how to treat this disease. Have I put the statement in rather too extreme a way?—I do not wish to refer to Glasgow as distinguished from other places specially; but, as a result of conversations with young medical men with regard to their training in syphilis, the general reply has been that they were not adequately trained in practical matters, and especially concerning the recent advances of knowledge as to the prevalence of the disease and its efficient treatment. I think that is the general opinion.

7099. Then, seeing that a very large percentage of the population must rely upon the ordinary general practitioner for the treatment of the disease, we should be right in coming to the conclusion that that proportion of the population have no means whatever of being adequately treated for it?—I should think they would be very much better treated if students and medical men were much better trained in that disease, and, I believe that the prevalence of the disease merits it obtaining a prominent place in medical training.

7100. I do not remember the precise figures, but in your paper you give the figures of the percentage of cures by mercury, which is very small as compared with the treatment by salvarsan?—I have not quoted figures as regards salvarsan.

7101. You make the statement, at any rate?—Salvarsan presents an additional means of treatment which is of the utmost value.

7102. You say that after treatment by pills and the like, 30 per cent. of the cases still reacted positively?—I have quoted that result, but it is not mine.

7103. No, it is not; but seeing that the ordinary practitioner cannot treat by salvarsan, it follows that only a very small percentage of the cases of syphilis could be treated effectively?—In answer to previous questions I wished to convey the idea that a number of men could readily be trained, to treat syphilis by salvarsan. Certainly it is a much more laborious process than the mere prescription of medicine. The ordinary treatment of syphilis either means a prescription with which the medical man has nothing more to do, or it means a series of hypodermic injections, and these are rapidly given. Now the administration of salvarsan takes some time.

7104. I want to put one other question to you about the likelihood of serious manifestations from the alleged presence of syphilis in the body. You give the case of children who were suffering from whooping cough and the like, who had been admitted to some fever hospital in Glasgow, and you have stated that 8 per cent. of them showed a positive reaction under

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this treatment. I suppose in all those cases it would be a case of hereditary syphilis?—Yes, I think so.

7105. Then, am I right in assuming that there was a strong probability in all those cases there would have been serious manifestations arising from the presence of syphilis in the body later?—Nobody could say in which cases there were going to be serious manifestations and in which there were not, but I have known of a family where the eldest child had a serious eye condition and the younger children were healthy apparently; but when several of the younger children attained to about the same age as the elder one, in them also the eye disease occurred.

7106. You gave us a case where I understood you to say both patients showed a positive reaction under the test and one out of six of their children only, or it might have been the other way about. It does not affect my point at all?—There was only one child out of the whole of the family which reacted positively, and the parents were negative.

7107. Then how would you account for the presence of syphilis in that child. It could not have been through infection, could it?—I am quite sure it was a case of congenital syphilis. When you asked me regarding the Wassermann reaction, I said it was not invariably positive when syphilis was present, and it is quite possible for syphilitic infection to pass into the stage at which it gives a negative reaction, but it may subsequently pass into the positive stage again.

7108. Of course, I cannot speak to you in technical terms about these things, but does that mean that the syphilis germ may be quiescent for a time in the body?—Yes, it may be quiescent for a time.

7109. Is it possible for a person to be infective if there is no sore at all?—A person may be infective at a time when there is no sore.

7110. May I make my point a little clearer by referring to that oft-quoted case here of a man who infected his wife after 13 years. It is not likely there would have been any outward manifestation on that man's body?—No, there probably was no outward manifestation.

7111. Then in what way was the infection conveyed?—It must have been present in the tissues, I take it, and have been conveyed by the spermatic fluid.

7112. But I understood you to say to Mr. Lane just now that it could not be conveyed like that?—No, I did not say that. You did not understand that, did you, Mr. Lane?

(Mr. Philip Snowden.) I beg your pardon; Mr. Lane himself threw some doubt on that.

(Mr. Lane.) Yes, I did.

7113. (Mr. Philip Snowden.) Then arising out of the question which has been put to you already—perhaps you are not in a position to give an answer to this question—but you refer to the prevalence of syphilis amongst the poorer classes. Would you say it is much more prevalent amongst the poorer classes than amongst the men of the upper classes?—I have no basis for such a conclusion.

7114. Just a word or two about notification. You appear to appreciate the difficulties of carrying out any scheme of notification?—Yes, I do.

7115. You do not suggest that the notification should be made to a public authority, do you; that a register should be kept of people who are known to suffer from these diseases?—I think that some comprehensive official method must come into use in the future, but I would make no such suggestion at present. I think the present temperament of the public is such that they would strongly object. I believe publicity would hinder the detection of syphilis at present.

7116. I was rather interested in this matter of the length of cure. You referred to Mr. Lane having at one time been of opinion that the cure should extend from five to seven years, I believe he is inclined now to fix a much shorter period than that?—Is that with salvarsan, Mr. Lane?

7117. (Mr. Lane.) My opinion has been modified considerably since that was written?—But the shortening of the period has reference to salvarsan.

(Mr. Lane.) Certainly.

7118. (Mr. Philip Snowden.) What would be the form of treatment during that lengthy period? Would the man be taking medicines?—Do you mean during five to seven years?

7119. We will say two years?—I do not think I should answer that question. Mr. Lane will tell you in a far more authoritative way than I can what he would consider an efficient time.

7120. But if it became known that a person was to be subjected to treatment for two years, and especially if there were a possibility that he was going to be prohibited from getting married, even at the end of that time, do not you think that would be a very great deterrent to people going for treatment for this?—A course of two years' treatment at least is the advice that every doctor, I think, who has the interest of his patient at heart would give under the mercury régime.

7121. (Dr. Mott.) Do you approve of Sach's method of cholesterol heart extract as antigen?—The addition of cholesterol was borrowed from us.

7122. Yes, but that is very much used. The army authorities use it and we have used it instead of the original Wassermann syphilitic liver?—Of course, the criterion of a Wassermann reaction depends on the particular reagents you are employing, and we have found with heart lecithin that some nonsyphilitic sera reacted positively according to our original standard. That is the only reason I have not used heart lipid; I use liver lipid.

7123. But you would not take exception to that method?—It is used in Wassermann's own laboratory?—I know. The improvement which I would suggest to many workers is that they should not attempt to perform the reaction with only two or three tubes.

7124. I mean four or five tubes?—We personally lay more weight on carrying out the test with a varying amount of complement—keeping the amount of serum and lipid emulsion constant.

7125. Some people use varying quantities of hæmolytic serum?—Yes, I know.

7126. But it very much depends on the investigator getting used to his method, does it not?—I think it depends on his establishing a good standard.

7127. Yes, you would not take exception to that method, would you?—I would not take exception to any well-controlled method of conscientious work.

7128. Then as to inactivation of the serum by heat. I think that is the essential. Do you think the cold method is any good?—The method of using the patient's serum unheated?

7129. No, putting it into the ice box?—At the first stage. These must be all very definitely controlled before they can be adopted, using negative sera as controls. Our method before we recommended it for use or used it ourselves extensively for diagnosis, was controlled by testing a very large series of general paralytics and of normal sera.

7130. Yes, that is how we controlled it. Then as to the quantity of blood, you lay stress upon taking it from a vein always?—I have taken blood frequently from my own finger, but I think it a more painful process.

7131. And you do not get so much?—No.

7132. You have not mentioned the luetin test. Do you use it at all?—I have just begun to investigate it.

7133. You cannot tell us whether you think Noguchi is right in claiming that you can get a more definite statement with regard to the probability of cure if you get a negative Wassermann and a negative luetin test?—I have only made a small number of tests, and can express no opinion.

7134. You know some experiments have been done by Nicolle in the French army, which seem to show that, where they were able to observe the effects for a considerable time afterwards?—Yes, but I do not know personally.

7135. Then with regard to the case that you have mentioned of the 13 years, do you think it was possible that the sperm might have conveyed it?—Yes, I wished to convey that idea.

7136. I remember a case that occurred in my own practice. It was a case of juvenile general paralysis. I was convinced, of course, that it was syphilitic in

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origin, and when the parent came I asked him straight out whether he had had syphilis. He was a man of good position and he would not admit it at first, but then he admitted he had had syphilis and had been treated for four years with mercury. And the result after his marriage was that the first child died within a day or two, the second one died within two or three days, the third one became deaf and suffered with keratitis, and the fourth was this paralytic which had not any sign on the body of any syphilis at all. Of course it would have given a Wassermann reaction. Then there was a healthy child. One often notices that order of events. I contrast that with another case. There was a man who was infected and he had a month's treatment with mercury and married after two years. He had a perfectly healthy family but developed tabes later. It seemed to me the only explanation I could offer of the contrast between the two cases was that in one case the sperm was infective and not in the other. As you rightly say, one knows from experiments that the sperm in animals that have been infected, as shown by Neisser and others, is infective and the primary lesions can be obtained. Then with regard to the early diagnosis, do not you think that is the essential point of the whole of our modern developments?—It is most important to educate the public so that they submit themselves at the earliest opportunity for diagnosis and treatment.

7137. At the earliest possible opportunity, so that if one could get the individual with the primary sore before generalisation had taken place, and that is before a positive Wassermann reaction would be given, you might, by injection of salvarsan, prevent the patient ever suffering from generalisation of the organism in the blood; would you agree?—I think that is the great aim.

7138. What evidence would you offer of the man having been cured; that is to say, that the organism has been completely eliminated from his body?—Do you wish me to recount the means at present available?

7139. No; what evidence is there? Some people say that syphilis can never be cured?—I consider that if the patient continued on repeated examination to give a negative Wassermann reaction, and if, in spite of provocative treatment, of which, however, I have no great experience, he still reacted negatively, there would be a strong presumption of his being cured; and in addition, of course, the luetin test should be systematically employed.

7140. But a good number of cases have been recorded now of re-infection?—I think the re-infection with syphilis is a convincing proof of efficient treatment. Prior to the introduction of salvarsan, re-infection with syphilis was one of the greatest rarities, but now the number of such cases on record is very great, and that speaks as cogently as anything can for the efficacy of salvarsan as a method of treatment.

7141. On the principle I have mentioned, that it prevents the generalisation in the blood?—Yes; if administered sufficiently early.

7142. Do you think when this generalisation takes place in the blood the organism may, at the time the primary rash comes out, be lodged in the brain membranes and other parts of the body, and remain latent there for a very long time?—I think all the evidence points to that now.

7143. Then you believe that every case of general paralysis is syphilis—that is the essential cause?—Yes. Where the cerebro-spinal fluid has been examined in addition to the blood—these are Gilmour's results, and I can speak of them—according to our method, we get 100 per cent. of positive Wassermann reactions in general paralysis.

7144. We find practically 98 per cent. and every case controlled by post-mortem examination. You have not made any examination of the brain itself for the spirochaetes, have you?—I have not yet.

7145. I have found it in about 70 per cent. of the cases?—I know your results.

(Dr. Mott.) So that you could not distinguish the difference between the organism in the brain that you found in general paralysis and that in primary chancre,

and I think that is further conclusive proof together with the fact that in every case you get a Wassermann reaction, as you have said. Could you tell me what is the relative proportion of males and females of the general paralytics in the Gartloch Asylum.

7146. (Mr. Philip Snowden.) The admissions you gave were 20 and 22?—No, those were exclusive of general paralytics. I can tell you in a moment.

7147. (Dr. Mott.) I think it is rather important as indicating the relative incidence of syphilis in the male and female population. One found, in going through the statistics of the admissions to the London asylums, that the East End parishes furnished relatively more women than the West, but in the West End parishes there were many more men than in the East, which rather looks as if there was a correlation between the incidence of syphilis in the classes?—With regard to this series of 27 cases of general paralysis, 23 of them were men and 4 were women.

7148. Then with regard to the mental deficiency and epilepsy, it is very difficult to separate coincidence from cause, is it not, the incidence of syphilis in these mental defectives and paralytics. I mean to say, where you get a large part of the population suffering from syphilis, as you evidently have in Glasgow, you must have a good many cases of mentally defective mothers and fathers who, very probably, will have mentally defective children?—Yes.

7149. And they are the class of people who would get syphilis, are they not?—Yes, but the incidence of syphilis among cases of mental deficiency and epilepsy was 59 per cent.

7150. Yes, but some of that 59 per cent. might be coincidence?—Yes, it must be.

7151. I think you must admit that, because in rural districts you get children of non-syphilitic parents suffering quite early with epilepsy?—The association of syphilis with 59 per cent. of cases seems to me too great to be merely coincidence.

7152. Yes, I see what you mean, and I quite agree with you there. I think the fact that you have examined children at an early age will explain the difference between the percentage that we have obtained, for out of 430 adult epileptics in the London County Asylums, only 8 per cent. gave a positive reaction?—Gilmour got 13 per cent.

7153. Yes, he got more?—But still a small number.

7154. Yes, it is small. You did not examine the cerebro-spinal fluid in your cases of organic nervous disease, did you?—There appears to be a prejudice against submitting it.

7155. So you could not tell me what proportion gave a positive reaction, but you told the Chairman that you thought a larger proportion of those nervous cases would give a positive reaction in the cerebro-spinal fluid than the blood. Do you think so?—I did not mean that.

7156. You said so. You conveyed that impression?—What I meant was that there was a prevalent idea that the presence of a positive reaction in the cerebro-spinal fluid enabled a diagnosis to be made between general paralysis and other syphilitic brain conditions. As regards Gilmour's results, out of 88 cases of insanity—not general paralysis—a positive reaction was obtained with the blood in 37, and in 18 of these 37 cases the cerebro-spinal fluid was positive; it is to be noted 13 of those 18 cases presented no clinical evidence indicative of syphilis in their mental or physical state.

7157. Then with regard to the statement that metritis and uterine hæmorrhage and so on were due to syphilis, most of those cases, which, as Mr. Lane pointed out, lay themselves open to infection, were equally liable to be infected by gonorrhœa?—Yes, I have used the word "associated."

7158. Because I showed here that 56 per cent. of female paralytics had adhesive inflammation of the ducts, and we had previously examined those cases for gonococcus and found gonococcus in a great number of them. It was gonococcal infection rather than syphilitic infection?—Still, you would allow that the evidence points to syphilis being present also in many cases.

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7159. Yes, I would allow some of them to be syphilitic; but, still I think it would be more likely to be due to gonorrhœal infection than syphilitic infection?—Yes; but you would allow that gonorrhœa and syphilis are very closely associated.

7160. Yes, in a good many cases there is mixed infection of the two. Then with regard to the tramps, it is rather extraordinary that all those tramps should have had healthy children if they gave a positive reaction, and all mothers and fathers gave a positive reaction, because that is not the usual order of things, is it?—The children were not seen on account of illness. More than half of them showed no clinical evidence of syphilis on physical examination. But how curious conditions are in tramps is brought out by a family that was published by Dr. Watson. This is a case in which there were six children, three pairs of twins, in 22 months. The youngest children were the most syphilitic clinically, and the whole family, both children and parents, reacted positively. It seems as if there was some modification of syphilis in that class of the community.

7161. You see Plaut showed that a large proportion of the children of paralytics gave a positive reaction and only an infinitesimal number showed any signs on the body at all, so that it looks as if when it is spread through a community or race it becomes modified in its virulence?—Yes, I think so.

7162. So that they gave a positive Wassermann reaction, but the Wassermann reaction is not an indication really of the severity of the disease altogether?—I have never held that the degree of strength of the Wassermann reaction had any relation to the severity of the infection clinically.

7163. I know that you said so. You said late manifestations are very intractable, but, surely, a gumma may be a late manifestation and glossitis and orchitis; yet they yield like magic to mercury, and iodide of potassium, and disappear completely?—Yes, but the intractable conditions are amongst the late conditions.

7164. I admit that. Can you give me any reason, or have you thought of any reason why these so-called parasymphilitic—I prefer to call them parenchymatous syphilitic diseases—should be so intractable to treatment?—From what I have seen experimentally, I think the drug does not act like an antiseptic in the test tube. In the body there is a co-operative action of the drug along with the tissues on the parasites.

7165. You mean to say, it increases the anti-bodies, perhaps?—In some way co-operates, yes.

7166. Why should not it increase the anti-bodies in the brain and get rid of the spirochætes?—I do not think I catch you correctly.

7167. Drugs have a marked effect on the gumma?—Yes.

7168. But they have no effect on the spirochætes in the brain of a paralytic?—I think, for some reason or other, the paralytics' tissues have lost the power of co-operating with the drug.

7169. Yes, but cases have been recorded where they have had a marked skin disease and the drug has cured that and has had no effect on the brain disease?—The anatomical relationships are responsible to a great extent.

7170. Is it not that the mercury and the arsenic do not pass in?—That is the explanation in part at least.

7171. Then you would say that the Wassermann reaction does not necessarily mean infectivity to others?—I would say that definitely.

7172. I think you want to emphasise that. I think it is too rigid a test to apply generally?—Yes, in the case of marriage a positive reaction would only be an indication for further treatment prior to the marriage; it would not be a barrier, even if it remained positive after such additional treatment.

7173. (Rev. J. Scott Lidgett.) I think you said that leprosy gives a positive Wassermann reaction?—Yes.

7174. May I ask whether completely exhaustive experiments have been made in Europe to show that no other disease save syphilis that is found in these countries gives a positive reaction?—I think the experiments may be regarded as exhaustive.

7175. That is to say, that even obscure and comparatively rare diseases have been tested in regard to the Wassermann?—Paroxysmal hæmoglobinuria is an example. If you get a positive Wassermann reaction in cases of obscure disease associated with positive Wassermann reactions in other members of families and associated with clinical phenomena that are admittedly syphilitic in other members, I think that enables you even to transfer the evidence to cases where the clinical phenomena are lacking, and say that these also are syphilitic.

7176. Then there is still a measure of assumption, although a very small measure of assumption, in concluding that the Wassermann reaction is always a sign of syphilis?—I think there is a smaller measure of assumption than there is in regard to many things that are accepted by everybody.

7177. The human race is rather tempted to make unfounded assumptions?—Yes, they are.

7178. You spoke of the tertiary stage ceasing to be infective. May not there be a relapse after that stage into infectivity?—I do not think there is any definite evidence of that. Of course, the term "tertiary" denotes a particular form of late lesion rather than a particular period of time.

7179. Not after the tertiary stage?—No, I think there is no evidence. Dr. Mott could tell you that.

(Dr. Mott.) I was just wondering whether your 13 years would not be a tertiary stage or a quaternary stage perhaps.

(Rev. J. Scott Lidgett.) That is the point that has suggested the difficulty.

(Dr. Mott.) But these cases are extremely rare, Fournier used to say after four years a man could marry if he had been properly treated, and it was very rare that an accident happened.

7180. (Rev. J. Scott Lidgett.) Then you think it is not an assumption that you have made? Would you expect to find a larger proportionate incidence of undiscovered syphilis among the hospital inmates than among the general population?—I have no basis for an opinion. Anything said by me would be a mere surmise.

7181. I understood you to argue that undiscovered syphilis predisposed people to many other diseases?—The detrimental effect of untreated syphilis on the health of a community, I believe, is great. The syphilised individual is very frequently a poor subject, and I think the hospital statistics will prove that his resistance to disease in general is below the average.

7182. Then would not that rather tend to establish that the percentage in hospitals might be higher than in the general population?—I think it must be, but that is a mere deduction. What I wanted to emphasise was, that so far as the question of health administration is concerned, one has to deal with people who are ill, and syphilis is closely associated with the ill population.

7183. By that I suppose that in people of vigorous constitution syphilis may be present for a long time in a highly infective stage without very seriously affecting the general health of the patient?—Yes, that is true.

7184. So that that consideration on the one hand would balance the consideration that you have drawn from the fact that delicate people are liable to contract other diseases because of the lowering effect of syphilis?—Yes.

7185. In a way, the universal treatment of all inmates in hospitals would only cover a very small proportion of the whole field with which we have to deal?—It would not cover more than a proportion.

7186. Then what measures do you advise in regard to the rest of the population? Mr. Snowden put it to you just now that as the general practitioner is hardly likely to be able to use salvarsan at any rate for a very long time, the general population must go untreated unless they come into hospitals. What steps would you advise to meet that need?—I think that the steps taken by a few corporations, including Glasgow, are good. They are prepared, at the public expense, to examine specimens of blood sent to them.

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That is a very important step for the detection of the disease.

7187. And would you follow that detection of the disease by providing equally free treatment until a cure was effected?—One is certain that the disease requires treatment when it is present, and, therefore, I think all means should be taken just as here you are convinced that diphtheria is worth treating and you supply anti-toxin free.

7188. But would you in the case of this disease, in order to stamp it out, impose the duty on the State of providing free and adequate treatment in the hope that the patients would adopt it?—I believe it would be a wise policy.

7189. And that would be your answer to Mr. Snowden's difficulty about the working population?—Yes, I think in treatment lies one of the main roads to success in stamping the disease out.

7190. You would provide the treatment, I understand, encouraging people to avail themselves of it, but not in the present stage compel them to do so?—With regard to the first two things, it is as you say. With regard to the third point, I merely suggested that if any hold is to be taken at all on the population a commencement might be made by taking hold of those who present themselves at hospitals and making them submit to proper treatment.

7191. But you would endeavour, as I understand, through the action of the State to extend the means of such treatment and to encourage people rather than compel them to avail themselves of it?—I think encouragement is the present need.

7192-3. You spoke of the destruction of the stigma attaching to these diseases. Do not you think that the destruction of that stigma would involve, under present conditions, a multiplication of risks?—To answer that question fully would require very mature experience; but I know that many who have contracted the disease profess to have done so in ignorance of it, and I believe that a full knowledge of the consequences of the disease would, in a proportion of cases, act as a deterrent and in others would lead to early treatment. I think that stigma does not altogether prevent people from incurring the disease. Just before coming here, a young medical man, presented himself and said he had incurred the risk of infection. In this case there were no typical phenomena, only a small sore 10 days after exposure, which healed rapidly, but the Wassermann test was positive. That young man knew much more about syphilis than the general community, but that did not prevent him from incurring the risk.

7194. Then the knowledge of the nature of the disease and of the means for its treatment does not in itself prove preventive?—I am inclined to believe that the value of knowledge is that it will at any rate lead to early diagnosis and treatment, and I think it will deter some from incurring the risk of infection. I am quite sure it will not prevent all—at least, if I read human nature at all in those I have met.

7195. (*Sir John Collie.*) Have you any experience of the Wassermann reaction taken from patients when under an anæsthetic?—That is a point I do not know about from personal experience. It is a question I have had in my mind to investigate.

7196. If your suggestion that the blood of every patient should be taken at the hospital were systematically carried out for a few years, would that have an enormous effect on the reduction of the disease as the result of the treatment which would follow in cases where the disease was found to be present?—Yes, I think it would.

7197. In the event of that being impracticable, I take it, at least it could be made optional?—Do you suggest that the systematic examination would be impracticable owing to patients refusing to submit?

7198-9. No, I was thinking more of the expense to the community, and the number of medical men whose time it would occupy, and so forth? I wanted your view generally upon the number of patients in hospitals who would allow their blood to be tested—provided there was no compulsion?—I think most patients would

permit it, providing they did not get too much option and were tactfully handled.

7200. Your answers have all along been so scientifically accurate that I want to preface this question with a request for you not to be too precise. I ask no more than a general impression, because I know you cannot give us exact data about it; I wish you to tell the Commission, if you have any experience (and you obviously have, from what you have said) of innocent infection of syphilis amongst doctors, nurses, and so forth. I want you to give us some impression as to whether it is a common or very rare?—If I said that I had seen a number of cases, that might give the impression it was common, and yet it might be very rare. Within the last two years—I am speaking, as you say, just generally—there have come to my notice two recent cases in which medical men acquired the disease innocently, and two old cases. Then one sees, not infrequently, sores on the lip, which I think are, practically, always accidental. Further, there is no doubt that women are innocently infected in very many cases after marriage.

7201. You are a pathologist. You do not lay yourself out specially for treatment?—No. I have had the treatment to some extent thrust upon me.

7202. So that as you do not lay yourself out as a practising physician, it is rather a large number, is it not?—It shows that it is not an uncommon occurrence, and, as I say, I think very many women are infected after marriage.

7203. With regard to these unfortunates who were examined, and of whom all were found to be infected, I take it your friend with the talent for sociological investigation did not choose those women; they were taken more or less haphazard?—Yes, they were taken haphazard.

7204. They were not taken clinically at any rate?—They were not chosen as the result of clinical examinations.

7205. That is the important point. Now, with regard to the early diagnosis and treatment. Have you anything to suggest with regard to a method whereby the general practitioners might have opportunities of early diagnosis, both the investigation for the spirochæte and the Wassermann reaction, specially with regard to how it could be carried out generally?—I think the corporations could extend their laboratories for that purpose, and, a beginning has been made.

7206. (*Dr. Mott.*) At Glasgow it is the University that does it, is it not?—No; we have no connection with the City Laboratory. Dr. R. M. Buchanan is the City Bacteriologist, and he is housed in the Public Health Department.

7207. It is not connected with the University?—No, it is not.

7208. In many towns in the north of England it is?—Yes.

7209. (*Sir John Collie.*) Then with regard to the difficulty of the general practitioner applying the salvarsan or neo-salvarsan treatment, I take it for a qualified man it would not be a very laborious business to teach him to do it; possibly a course of, say, six lessons at a post-graduate school and so forth would teach some men—a large number, not all—to perform the small operation successfully?—A short course, yes. There is, of course, another point to be considered. I know there are prejudices against general practitioners undertaking operative procedure of any kind. That is a different matter. Practitioners have told me that they would not give a hypodermic injection because if the patient died they would be accused of killing him.

7210. I think you will appreciate what I had in my mind was the two classes of general practitioners, and it was the better-class one I referred to who would dare to undertake that. He might be instructed in a short course?—Any man who was willing and anxious could be instructed in a short course.

7211. Now, unless the presence of the spirochæte is undoubted evidence of syphilis, I take it you will agree that the fact that it is not found is no proof that it is not there?—It may not be found at the site at which it is looked for. I have related the case of

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[Continued.]

the infected doctor. You have to get the lesion at a suitable period

7212. (*Mrs. Burgwin.*) About what time elapses from the time of infection to the appearance of the primary sore?—It is a matter of some weeks; it varies; but four or five weeks is considered to be the usual incubation period.

7213. Is the person infectious during that period before the sore appears?—I do not think there are statistics bearing on that question. There certainly must be spirochaetes at what is going to be the site of the sore—and therefore on purely theoretical grounds he must be infective. But the infectivity depends to a great extent on the number of infective agents present, and if that number be very very small at first, he will be practically non-infective. Of course the most infective period, as far as the sore is concerned, is the period during which the spirochaetes are present in great abundance; that is when the sore is ulcerated and has not begun to heal. But as these cases of late infection have shown, a patient may be infective at the period when he has no sore, when, in fact has no manifestation of illness that he knows of.

7214. And yet he would not come for treatment or examination until that sore did appear, I presume?—I think that in a number of cases the person would be willing to take measures almost immediately after exposure to infection. There is a German case recorded in which a man applied locally a very powerful mercurial preparation almost immediately after exposure, with the result that he aborted the primary phenomena apparently, but the secondary manifestations of the disease broke out some months afterwards.

7215. With regard to those mentally deficient children, I understand you took a blood test?—Yes.

7216. Where did you take the blood test?—These cases were taken on the private initiative of Doctors Fraser and Watson. Now I understand that the Glasgow School Board is making arrangements to include recognition of the blood test.

7217. That is, you would make the blood test compulsory on the children attending a special school?—I think all children should have their blood tested as part of the general examination. I think it should be one of the items of the examination.

7218. Of course you would apply that then to all school children irrespective of what class of school they attended?—I think all that come within the range of medical inspection should have their blood tested. What I suggested was that advantage should be taken of any general medical examination to include this. I believe that is the first step towards breaking down the prejudice. I should not say "We are going to examine you for syphilis"; but "You are a school child; we are going to examine your eyes and nose, and the testing of your blood is part of the examination." I have taken blood for a Wassermann reaction when the patient, an adult, had no idea what it was being done for. I think the commencement is to be made by carrying out the test when the people do not realise the object precisely, and when they find out that all this evidence has been amassed, the results will tend to remove the stigma and break down prejudice.

7219. You do not think anyone might think you had committed a common assault on them?—I do not think, unless that idea is encouraged, it would seriously suggest itself. The taking of blood is a very simple operation, and some of my collaborators have applied it to infants even, without any harmful effects.

7220. I think the people of Glasgow must be so totally different to the people of London, when you state they do not take objection. I cannot imagine parents of children in London consenting. Even if they were asked, I do not think they would give consent to a blood test being taken?—With regard to the mentally deficient children, the number of refusals was very small.

7221. (*Sir Kenelm Digby.*) You are speaking of Glasgow?—In Glasgow and Govan, which is really part of Glasgow. It is only Glasgow that I can speak of.

7222. (*Mrs. Burgwin.*) With regard to prostitutes, I do not understand how you account for these girls of 14 being classed as prostitutes; I mean, the use of the girls?—They were mainly in association with others, and living together, but all these girls were professedly young prostitutes.

7223. That brings me to my point. Was it owing to the fact that these younger girls were living with the older women?—And do you mean to ask whether these girls became infected by contact with the other women?

7224. And became infected in that way?—I do not think so at all. These girls had all been subjected to chance infection while acting as prostitutes.

7225. (*Dr. Mott.*) Was not a report issued from Glasgow some time ago by Mr. Motion?—Yes.

7226. That was a very striking report?—Yes.

7227. Of the extent of venereal disease amongst the poorer classes in Glasgow?—Yes. But this present work was carried out without official cognizance at all; it was private.

(*Sir Kenelm Digby.*) Dr. Love's evidence was very strong on that.

(*Dr. Mott.*) Yes.

7228. (*Mrs. Burgwin.*) Then you say that half of them lived in the best residential districts?—Yes.

7229. What do you mean by best residential districts? What class were they?—The men with whom they had dealings would be men of the well-off portion of the community.

7230. What do you mean when you say she was the daughter of a well-to-do tradesman, or something of that kind?—Those girls living in the west-end were all of so-called good family, their parents were mostly well-off.

7231. I notice in your conclusions that you consider very possibly there will be a close connection between the life of a prostitute and very ill-paid labour, and very ill-paid labouring women, do you not?—There of course, I cannot speak statistically. But from what I have gathered, there are certain occupations in which women are paid so little that they cannot, apart from great hardship, maintain respectability; that is acknowledged.

7232. Even apart from great hardship it would be practically impossible to maintain themselves on the wages sometimes paid?—I think a woman who had to live on 8s. a week or 12s. a week would have great difficulty.

7233. (*Sir Kenelm Digby.*) With regard to what you have been telling us about the Wassermann reaction, I see on page 11 of your paper you sum up the whole thing thus: "There is no evidence that a positive result is got in non-syphilitics even in 1 per cent. of cases." That is your opinion?—Yes, that is my opinion both from our own and general work. Frequently we have been in the habit of taking the blood of some of the workers in the laboratory. I will say "I am going to take your blood, and am going to use it as a control." We have never come across, among these people who have offered themselves, a reaction that could have been called positive. I think if such a thing had occurred I would never for one moment have considered publishing the work.

7234. (*Dr. Mott.*) I think that is generally right. Do you think that scarlet fever may have? Somebody said that someone had published some cases in which scarlet fever gave it?—We did examine a series of 37 cases of scarlet fever in various stages at the beginning of our work, and we did not obtain positive reactions. Of course the existence of any febrile condition can be excluded when the blood is taken.

(*Sir Kenelm Digby.*) Thank you very much.

The witness withdrew.

TWENTIETH DAY.

Monday, 23rd February 1914.

PRESENT :

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. DAVID BRYNMOR JONES, K.C.,
M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir JOHN COLLIE, M.D.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mr. PHILIP SNOWDEN, M.P.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Mr. C. A. BALLANCE, M.V.O., F.R.C.S., called and examined.

7235. (*Chairman*). You are the Chief Surgeon of the Metropolitan Police?—Yes.

7236. How long have you held that post?—For a year and a half.

7237. You are also surgeon at St. Thomas's Hospital, I believe?—Yes.

7238. How long have you been there?—Since 1875.

7239. Would you explain to the Commission the conditions which obtained as regards venereal diseases prior to June 1909?—Before June 1909, the police officers who reported themselves sick from venereal disease were sent to the Lock Hospital. They were looked upon as defaulters and their pay was stopped usually for a week, and then the Commissioner generally put them on half-pay afterwards.

7240. Up to that time, then, it was regarded to some extent as a penal offence?—Yes, as a penal offence.

7241. Then in May 1911 that system was entirely changed?—That system was entirely changed, and the Commissioner decided that venereal disease should be treated like ordinary sickness. The result has been that most of those afflicted or affected with venereal disease have reported themselves sick to the divisional surgeon, and have not, therefore, tried to keep it secret and gone to other private practitioners.

7242. The result has been the coming to light of many more cases of the disease than before?—Yes, a great many more.

7243. And as matters now stand, there is no penal result to the police officer?—None whatever; that is well recognised throughout the force.

7244. I see he pays 1s. a day for maintenance; he would also pay that in the case of any other disease?—Yes. From all those who are sick, unless from injuries on duty, 1s. a day is stopped. Those in other hospitals, for instance, would pay 1s. a day; but the maintenance in the military hospital is charged by the army authorities at 2s. a day, so that 2s. is stopped from the men's pay. There is that slight difference.

7245. That is the only difference?—That is the only difference.

7246. But as regards promotion and their future prospects in the force, no bad mark is put against them?—No bad mark whatever.

7247. Then in the table that you gave us, in the first five years all the cases that you return were treated at the Lock Hospital alone?—That is so.

7248. But I suppose there were other cases during those five years which were treated elsewhere?—Probably a large number.

7249. But you have not any record of them?—No, we have no record.

7250. Then in 1909 the first cases were admitted to the military hospital, and since then you send as many to the military hospital as that hospital can accommodate?—Yes; as many as we can possibly get in there we send there.

7251. In the following years, 1909 to 1913, there seems to have been an increase in syphilitic

patients: is that so?—I think it is probably due to the fact that the men have appreciated the treatment at the military hospital. They often send in requests to be sent there immediately.

7252. It does not mean any increase of prevalence amongst the police force?—I do not think that the figures actually mean that.

7253. What is the total police force under your medical supervision?—21,000.

7254. Therefore, judging by those figures, the prevalence of venereal disease, syphilis at all events, among the police is very slight?—Yes, very slight.

7255. Compared with other bodies of men of the same type. Then under you are the divisional surgeons. Would you just briefly explain what the medical organisation is?—The divisional surgeon has control of a certain number of police in his district. When these police are ill, they must report to him and the divisional surgeon attends them in their own homes. In cases of serious illness a report is telephoned to Scotland Yard, and then directions are given as to what is to be done with the police officer. In the case of venereal disease, the divisional surgeon need not wait for permission, but may immediately send the case to the military hospital, on telephoning and finding out that there is a bed vacant.

7256. All cases of venereal disease discovered by divisional surgeons are brought to your notice?—Yes, reported to Scotland Yard.

7257. On the 23rd November 1912, you issued a memorandum in which you refer to the opinions of the commandant of the military hospital, and the natural result of that memorandum was that you wished the divisional surgeons to understand that the patients discovered to be syphilitic were to be sent at once to the military hospital without the use of any calomel ointment, wash, or any other antiseptic?—Yes.

7258. That is what is done?—That is what I hope is always done. The object of sending out this memorandum was to inform the divisional surgeons as to the results of modern treatment, which I think probably some of them did not know, and to instruct them as to the means to be taken in case any member of the force was found to be suffering from venereal disease.

7259. You have laid down, as far as your office is concerned at all events, that no local treatment is to be employed until the diagnosis has been made. Those are your orders?—That is so, if the man can be sent immediately to the military hospital.

7260. Then, barring clinical observation, I suppose the divisional surgeons make no tests for syphilis?—No, I do not think that the ordinary doctor would be competent to do that.

7261. But would not the doctor, or the divisional surgeons at least, be competent to take blood serum to be sent for testing, if there was any doubt?—I think the military authorities always prefer to take the blood themselves.

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[Continued.]

7262. So that the divisional surgeon would depend upon his clinical observations?—Yes, upon clinical observations.

7263. And if he saw any form of primary sore or anything that looked like a primary sore, the man would be sent at once to the hospital?—That is so.

7264. Then if the military hospital is over-full, where are these men sent?—That is a very great difficulty; but my instructions are that they shall go to the nearest large general hospital.

7265. And which of the large general hospitals do you think take them for treatment?—They may go as out-patients in any general hospital, and in some cases they will be admitted.

7266. But you would not send them, I suppose, to a general hospital which was not competent to undertake the most modern treatment for them?—I think all the large general hospitals are quite competent.

7267. I suppose that your divisional surgeons would not undertake a microscopic examination?—Yes, some of them would; but I think not all.

7268. In order to make themselves certain before they send the cases to hospital?—Yes; no doubt some of them would be interested in doing it, and would be competent to do it.

7269. The figures which you give us as showing the results of early treatment seem rather striking. Out of 83 police constables reported as treated at the primary stage at the military hospital, you say that only three developed secondary symptoms. Out of 116 other consecutive cases only eight have had clinical relapses. Those are remarkably good figures, are they not?—Those are the figures supplied to me by the military commandant at the military hospital, Colonel Gibbard. I think they are quite wonderful.

7270. I think they are. All these cases of syphilis are cases of acquired syphilis, are they not?—Yes, of acquired syphilis.

7271. When a policeman is recruited, is a very careful medical survey made of him?—Yes.

7272. In every case?—In every case.

7273. And would syphilis, congenital or latent, be discovered in the recruit if he was otherwise healthy?—I think congenital would certainly be recognised, and I think it would be very unlikely that acquired syphilis would be overlooked.

7274. And do these cases of syphilis in police officers arise soon after their admission to the force, or some time afterwards?—I am afraid I cannot answer that question.

7275. Are the officers of the police under any regular and periodic inspection by the sub-divisional surgeons?—The divisional surgeon goes to the police station every day.

7276. But the men are not brought up and paraded for inspection?—No, they are not paraded for inspection.

7277. And he would not know of disease unless they reported themselves sick for one thing or another?—That is so.

7278. Do you think that under the arrangements you have made, which are now in operation, it is possible for any case of undetected syphilis to exist in the police force under your supervision?—Yes, undoubtedly.

7279. We have not got to the bottom of it?—Men, of course, may still not report themselves sick from venereal disease. Those cases must be many fewer than they used to be; but it is quite possible there may be some such cases now.

7280. But such cases at a later date probably reveal themselves in some palpable form?—Yes, that is most likely.

7281. Do you have to discharge many men from the police force for syphilis which has been undetected and consequently untreated?—We have to discharge men from the police force for the tertiary manifestations of syphilis, especially in the nervous system.

7282. Could you give us any idea of the number of men annually so discharged?—No, I am afraid I could not.

7283. Would those figures be obtainable?—Yes. I could give you some figures, but to what extent I am not quite sure.

7284. It is a little important, I think, as showing the degree to which the disease may exist without detection during the period of a man's service in your force. Now your memorandum deals entirely with syphilis. Can you give us any figures dealing with gonorrhœa?—No, we have no figures; but there are certain records with regard to gonorrhœa which we could let you have.

7285. We should be much obliged if you would?—A considerable number of men are taken from the army and the navy, and on their discharge sheets you may see "gonorrhœa." Those, of course, have had gonorrhœa long before they entered the force. They may enter the police force at the age of 27 or 28.

7286. And do men who join your police force from the army bring their medical sheets with them?—Yes, always.

7287. So that you know in every case whether those men have had venereal disease and what has been done with them?—Yes.

7288. Then could you supply the Commission with figures showing the incidence of gonorrhœa among your force?—I will endeavour to send all the figures we have to you.

7289. There is no hurry?—Do you want those who have had gonorrhœa before they entered the force?

7290. No. What I should like to know, and what I think the members of the Commission would like to know, are the returns showing what about the annual number of cases of gonorrhœa which occur in your 22,000 men. I suppose all those cases would be recorded in your divisional surgeon's records?—All those cases of the divisional surgeons would be in the books. There are nearly 180 divisional surgeons.

7291. Can you state to the Commission what approximately is the proportion of married officers in the service?—I can let you have those figures.

7292. Is it a large proportion?—Yes, a very considerable proportion.

(Chairman.) That might account for the moderate prevalence.

(Sir Kenelm Digby.) I think that is important to get.

(Chairman.) Yes, that is important.

7293. (Canon Horsley.) There is no embargo against marriage in the police, is there?—None whatever.

7294. (Chairman.) When men are recruited for your force, is there any lecture or information given them warning them against the risks they incur in London from venereal disease?—No, I think not.*

7295. And at any other period during their service, are any steps taken to bring these dangers to their notice?—Not that I am aware of.

7296. Do you know whether the police force resort much to irregular practitioners?—Only in very exceptional cases. I think that it generally happens there is something peculiar about the man if he goes to a practitioner, not to the divisional surgeon.

7297. Is it penal to go to irregular practitioners?—It is against the orders that they should attend any medical man except the divisional surgeon.

7298. Would a man be punished if he was found to be ill-treated by some irregular person, and then come under proper treatment?—He would probably be reprimanded.

7299. Nothing more?—No.

7300. You do not think that the practice of going to unauthorised doctors is widely extended in the force?—No. When one does happen to know of any instance of that sort, and the man comes before me, I point out the danger which he incurs from going to some doctor who is not so well known as the divisional surgeon.

7301. Do you think it probable that since the Commissioner has made the change of putting venereal diseases on the same footing as other diseases, that

* Note by witness.—I find on inquiry that recruits are warned on this subject while in the training school.

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[Continued.]

has checked the practice of going to outside practitioners?—Yes, I am sure it has.

7302. So that it has had that good effect, and the further good effect that the men reporting themselves are more likely to get early treatment?—There is no doubt about that. They are quite keen to go to the military hospital. I have seen letters asking to be sent immediately to the military hospital. That was not so in regard to the Lock Hospital, where men did not like going.

7303. It may be said that the reluctance to report themselves as possibly having one of these diseases, and also reluctance to go to a hospital, has much lessened?—Certainly.

7304. (*Dr. Arthur Newsholme.*) I have no questions arising out of your memorandum; but I should like to recall the time when we were fellow students and junior officers together at St. Thomas's Hospital, for a purpose which you will see immediately. That was from 1878 to 1880, or about then. I think you were house surgeon about 1880 or 1881. That is so, is it not?—Yes, 1880 and 1881.

7305. At that time, and during the two or three years preceding that, you were seeing a large number of surgical out-patients at St. Thomas's Hospital?—Yes.

7306. I think your recollection will coincide with mine, that a very big proportion of those out-patients were suffering from venereal disease; on the surgical side I mean?—I should not say a large proportion. I think that every day we did see cases of venereal disease, and very severe forms of it, not only amongst the men but amongst women, and we had a ward, of course, for women then.

7307. The Magdalen Ward?—Yes, and that no doubt attracted cases to the hospital.

7308. Would you think that these forms of venereal disease you saw then were more severe than they are at the present time?—They were less treated, and therefore I think they were more severe.

7309. You regard the much greater severity as probably being due to the lack of proper treatment, and prompt treatment?—I think so.

7310. A great many cases, not only of the primary disease but of the late results of syphilis, were seen in that out-patients department?—What results do you mean.

7311. Bone disease, or throat conditions and tongue conditions?—Yes.

7312. Skin rashes?—Yes; but we see them now.

7313. I was coming to that. You have, until how many years ago, continued to see out-patients at St. Thomas's Hospital?—I saw them for 20 years, and I saw them at Great Ormond Street for 20 years.

7314. Will you kindly carry your mind back to the last two or three years of that 20 years, and try to compare that with the earlier period, about 1880; would you say there were fewer venereal cases coming to the hospital in the later than in the earlier period?—I think there are fewer serious venereal cases. I think the results of syphilis and soft chancre were less often seen in the later period.

7315. But you would not be prepared to say that the prevalence, as judged by the out-patient department of St. Thomas's Hospital, is less in the more recent than in the earlier years?—I think the diminution of the bad cases is the same really all through surgery, and has been due to the early treatment of these cases, and instead of their being neglected and the absence of treatment in the old days.

7316. But apart from that pronounced opinion as to the diminished severity, you have no definite opinion, I gather, as to the diminished prevalence as judged by the practice at St. Thomas's Hospital?—No. I very much doubt the diminished prevalence.

7317. (*Mrs. Burgwin.*) You said that all large general hospitals are capable of treating these diseases?—Yes.

7318. But are they willing to do it?—They are not willing, I think to set aside a ward for the treatment of these diseases; but I think that if any case of syphilis went to a large general hospital, they would be bound to treat that case in the best possible way known at the

present time. That certainly we should do at St. Thomas's, and I believe all the large hospitals would do the same.

4319. (*Chairman.*) As out-patients or as in-patients?—They may be taken in for 24 hours or 48 hours.

7320. (*Rev. J. Scott Lidgett.*) I presume if they were taken in for 24 or 48 hours, that would be in order to administer salvarsan?—Yes, I think so.

7321. (*Canon Horsley.*) What proportion of the police have been soldiers?—I cannot tell you the number, but I can easily let you know.

7322. You have the record somewhere, of course?—Yes.

7323. Is it the majority of them?—No, not the majority; a small proportion.

7324. There are more civilians come in—young men from the country now—than there used to be?—Yes, we have a great many from the country.

7325. I mean more, say, than you got 20 or 40 years?—I am afraid I cannot answer that question. You see I have only been Chief Surgeon for a year and a half, and I do not know.

7326. A great many of those who have been in the army may have contracted either disease long before they applied for the police?—Yes, they may have done so.

7327. And they are more likely to bring it into the force than if they came from the plough tail?—I think possibly that is so; but they come in at a later period of life.

7328. I think I understood from you that there is no restriction, as there is in the navy or the army, upon the youngest constable marrying, if he likes?—None whatever.

7329. Can you tell us anything about the divisional distribution of these cases among the police?—You mean what part of London they happen in?

7330. Yes; whether, for example, there is more syphilis among the Haymarket Division than in the Camberwell Division, we will say?—No, I cannot answer that.

7331. That has rather an important bearing on the question of the morality of a district, especially the very thorny subject of the relation of the police to prostitution on the streets. You would hardly expect the man who has been consorting with prostitutes in his division to be very vigorous in checking street immorality?—I have a very high opinion of the police, and I do not quite follow that.

7332. I could not quite understand this stoppage of pay when they are ill. There is some pecuniary disadvantage?—Yes, 1s. a day.

7333. And is that the same if they go in with a sprained ankle, say?—Yes.

7334. There is absolutely no difference between the cases?—There is no difference except that it is 2s. in the military hospitals; but that 2s. is charged by the Government, and we pay 6s. for every administration of salvarsan at the Military Hospital. The police do not pay that themselves, but the Police Fund does that.

7335. Then the question of whether a man has made himself incapable of duty through heroism or through immorality does not come in at all. The two are treated as exactly equivalent?—No, because in case of heroism, a man would have full pay.

7336. But in the other case he does not have his pay stopped?—Yes, he has.

7337. How much?—1s. a day, and if he is in the military hospital he has to pay 2s. a day.

7338. But that 1s. is stopped for influenza, or anything, just as much?—Yes, but it is 2s. in the military hospital.

7339. (*Dr. Mott.*) You have had a very large experience at St. Thomas's Hospital, and at Great Ormond Street and Queen's Square?—Yes.

7340. Have you formed any opinion as to the relation of syphilis to serious nervous disease?—That is a most important relation, and the reason why men are discharged from the force in the later stages of syphilis is almost always, I think, in consequence of affections of the nervous system.

7341. What affections would you mention?—Tabes and general paralysis of the insane.

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[Continued.]

7342. Have you seen many cases of paraplegia from meningo myelitis?—No, those cases really I hand over to a physician. Some of them, of course, naturally have a surgical as well as a medical interest, and then we see them together.

7343. At Great Ormond Street had you much experience of the effects of syphilis?—Yes, in congenital syphilis a large experience.

7344. And you think, still, it is an important cause of disease?—I am sure it is.

7345. Then you took great interest, I remember, in disease of arteries?—Yes.

7346. Have you formed any opinion as to the relation of syphilis to arterial disease?—Undoubtedly it has a most serious effect on the whole of the arterial system. In fact, I do not think that aneurism in man really ever arises without a previous history of syphilis.

7347. Then you would think it was an important cause of arterial sclerosis?—Yes.

7348. And therefore of aortic disease and coronary disease?—Yes.

7349. Do you not think that a great deal of mischief was done by the idea that iodide of potassium in olden days was considered a suitable remedy for syphilis, and practitioners only gave that instead of mercury?—I think they did the best they could in giving iodide and mercury.

7350. I mean iodide alone—the Scotch idea, when I was a student, was that iodide was sufficient of itself?—I think I have many times seen a case of tertiary syphilis clear up under iodide alone. But there are some cases no doubt would do better with iodide and mercury.

7351. (*Mr. Philip Snowden.*) You think, then, that under the system which has been in operation for the last four years, you become acquainted with practically every case of syphilis in the police force?—With the majority.

7352. Apart from this deduction of 1s. or 2s. a day, as the case may be, do the men receive full pay when under treatment?—They do.

7353. And when a case of an officer suffering from venereal disease is brought to your notice, do you take any steps to ascertain how he has acquired it?—No, if I happen to see the man, which is not at all necessary for the purposes of treatment, because the divisional surgeon can send the case directly to the military hospital, I make a diagnosis without asking him how he has acquired the disease.

7354. Then you have no information as to the proportion of married men who are affected by this disease?—That I cannot tell you.

7355. Have you any reason to think that a fair proportion of them are married men?—No, I think not.

7356. They are practically all single men?—Certainly, the vast proportion are single men.

7357. Neither you nor divisional surgeons treat the cases, then?—The divisional surgeons practically are bound to treat all cases except those that are sent to hospital.

7358. But I understood you to say that every case was sent to the hospital?—If you read my memorandum, you will see that last year there was a large number that we could not get into the military hospital, and therefore the divisional surgeons had to treat them to the best of their ability.

7359. Dr. Mott just now put some questions to you about the manifestations of tertiary symptoms. How long after the acquisition of the disease as a rule is it before tertiary symptoms manifest themselves?—It may be any period up to 20 or 30 years.

7360. In the last paragraph of your memorandum you give some figures to which the Chairman called your attention, in regard to the number of cases which have not developed secondary symptoms. Over what period do those figures extend?—From the date, I think, at which the men went to the military hospital; and they have to report themselves every three months for two years. If the Wassermann reaction becomes positive again the treatment is repeated.

7361. You have no assurance then, that there may not be developments in a much larger number of cases than these?—You mean in the years to come?

7362. Yes?—No, I have not, and I do not think there is any possibility of preventing in any individual case the occurrence of manifestations long years afterwards. I believe with Sir William Gowers, that the only way of preventing the ravages of syphilis is absolute chastity.

7363. We should not be justified, then, in concluding that these figures represent actual permanent cures?—They are wonderful results, and a great many of them may be cures; but we have not sufficient evidence before us to know whether they are absolutely permanent cures.

7364. I gathered just now that you expressed your preference for treatment by salvarsan?—Undoubtedly.

7365. Did you see the report that was presented by the Berlin Police Medical Department last week on the use of that remedy?—No.

7366. It might be interesting if you were to see it?—What is it.

7367. It is a report by the Chief Medical Officer of the Berlin Police on the use of salvarsan, in which he says that the use of it does a great deal more harm than good, and he concludes by making a very strong appeal for the State prohibition against it.

(*Chairman.*) That may, of course, be due to faulty technique. We can set against it the very considerable experience of the naval and military medical officers.

(*Mr. Philip Snowden.*) He said they had begun to use it before there had been a sufficient number of experiments made.

7368. (*Chairman.*) That is very likely the explanation?—Of course I read, like everyone else, of the dangers in the use of salvarsan; but I may say that in the cases I have used it I have never seen any danger arise from it, only good.

7369. With reference to the question that the Chairman addressed to you as to giving information to the police about the seriousness of this matter, do not you think it would be desirable that something should be done by way of warning?—That might be represented to the Commissioners, the authorities at Scotland Yard.

7370. (*Mrs. Scharlieb.*) Is it not your opinion that gonorrhœa is a very serious disease as far as it affects women?—Undoubtedly. All these diseases are.

7371. A very large number of cases of sterility in women are due to the infection that they acquire of gonorrhœa?—Yes, that may be so.

7372. And is it your opinion that a large number of the serious operations done for pelvic disease in women are due to gonorrhœa?—A considerable number, undoubtedly.

7373. Then is it not also your opinion that we ought to be as careful in endeavouring to cure both men and women of gonorrhœa as we would be to cure them of syphilis?—Certainly.

7374. Do you think that, taking our institutions as a whole, quite sufficient attention is being paid to the infection by gonorrhœa?—You mean the hospitals?

7375. Yes?—No. I think the hospitals lack in great measure the proper departments for the treatment of this disease.

7376. As a matter of fact it is looked upon as being a minor trouble as compared with syphilis, and it runs the risk of not being sufficiently heeded, and, therefore, not sufficiently treated. It is looked upon more as an inconvenience than as a very serious matter?—I think the main thing is that the great hospitals have no departments for the treatment of these diseases. They have a department for the treatment of deformities and the treatment of children's diseases and the treatment of gynaecological diseases and so on, but they have no departments, or, at any rate, imperfect departments, for the treatment of these various venereal diseases.

7377. The point I was very anxious to bring out was that you would agree that gonorrhœa also constitutes a great national danger, and that in our great anxiety to discover and treat syphilis properly, we may

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possibly be running the risk of not paying sufficient attention to this other disease, gonorrhœa?—I should group all these diseases under one head as being exceedingly dangerous to the community.

7378. (*Mrs. Creighton.*) You speak of a large number of cases for which you were not able to obtain hospital accommodation in 1913. It would, therefore, be your opinion, I conclude, that it would be very desirable to have more hospital accommodation such as that provided at Rochester Row?—Undoubtedly.

7379. There is not at present sufficient hospital accommodation for the men of the police force?—That is quite true.

7380. With regard to this change in the treatment of the cases of men with venereal disease in May 1911, when the practice of suspension was discontinued, and these cases treated as any other disease, what was the reason that led to the change?—I am afraid I cannot answer that question, because I was not Chief Surgeon.

7381. I fancied that some of the things you said rather implied that the change came mainly from the desire to get the men to report sick at once?—I believe that was so.

7382. Not from any idea of wishing to treat the disease more lightly?—No. The only object of the Commissioner was to do the best he possibly could for every man in the force.

7383. If a man now comes to the divisional surgeon, having acquired venereal disease some weeks before, having reported himself, is there any form of blame or penalty attaching to that?—No, none whatever.

7384. Is it possible, considering the facilities now applied for the cure of the disease, to attach any penalty to a man not reporting sick at once?—I think that is an executive question, and if my advice were asked about it, I should say it would be unwise to have any penalty at all. We want to encourage these men, and I think very likely if they do not come at once it is from ignorance and want of knowledge.

7385. Then when a man has been to hospital and further treatment continued, as I gather it often must be for a period of years, it would be insisted upon that he should follow that treatment?—Yes, undoubtedly.

7386. And there is every means for seeing that he does?—Yes, and he is only too glad to do it. We do not find any difficulty about that at all.

7387. Am I right in thinking these figures you give here only apply to syphilis, and do not include gonorrhœa?—Yes; the figures have to do simply with the primary manifestations of syphilis.

7388. I mean the number of cases you give on the second page?—No, they are not only syphilis. Some of them are cases of gonorrhœa.

7389. Venereal cases generally?—Venereal cases generally; they are not only syphilis.

7390. (*Chairman.*) I did not understand that. Is that in the table you gave us?—Yes.

(*Mrs. Creighton.*) I think you rather implied they were only syphilis.

7391. (*Chairman.*) I certainly understood it so. Then we may take it these figures in the table are partly cases of gonorrhœa?—Yes; they are all cases sent by us during 1913 to the military hospital, and some will be cases of gonorrhœa, some syphilis, and some of soft chancre.

7392. (*Sir Kenelm Digby.*) And, prior to that, from 1904 to 1908 to the Lock Hospital?—Yes.

7393. (*Mrs. Creighton.*) Am I right in concluding from what you say that the Wassermann test is not applied to recruits?—No.

7394. Also you know of no special instruction being given to recruits about the dangers of London?—No, I do not.

7395. You would think it desirable it should be given, do you not?—I should think that would be a good plan.

7396. And would you tell me, because this is a point I am ignorant upon, what kind of men the divisional surgeons are? Is theirs a whole-time appointment?—No; they are appointed for five years, and they are the best men to be obtained in every neighbourhood.

7397. But they give their whole time?—No, not their whole time, because you see in an outlying part of London they would only have perhaps 50 men under their care.

7398. Then they are general practitioners in the district they serve?—That is so, and there is great competition to be made a divisional surgeon.

7399. (*Mr. Lane.*) You say that your officers are only admitted to Rochester Row if there is room, therefore a considerable number of them have to wait?—Yes.

7400. That is distinctly prejudicial to their health, and would rather encourage the disease than otherwise?—It is apparently disastrous.

7401. Then could you compel them to go to any other hospital where you knew they would receive equally efficient treatment?—Undoubtedly. The Commissioner could compel any of his officers to do anything he considered was in the interest of the individual or the Force.

7402. Could he compel them to go to the Lock Hospital, for instance?—Certainly.

7403. Probably, it is not for me to ask, but would you think the treatment there is carried out efficiently?—Yes, no doubt it is excellent.

7404. Then, would it not be better for these men to be sent to the Lock Hospital rather than, as you say they are, sent to the divisional surgeon to treat?—The Commissioner has endeavoured to obtain beds in various hospitals; but I know he has not written to the Lock Hospital, because the force dislike the idea of going to that hospital, I suppose simply because of its name.

7405. Do you think if the name were altered they would go?—I think there would be no difficulty.

7406. You are aware that the hospital has been reconstructed, and is now as modern as any hospital can be?—Yes, that is so.

7407. Then, in your opinion, all the general hospitals are competent to treat cases of this sort. Do you think that a case of early syphilis sent to a general hospital would of necessity be treated by salvarsan at once?—I cannot speak of every general hospital; certainly it would be at St. Thomas's. He would be sent in for 24 hours or 48 hours, as the case may be, for salvarsan treatment.

7408. A good many junior surgeons are not competent to use salvarsan?—Who do you mean by junior surgeons?

7409. I mean the assistant surgeons of the hospital, the surgeons in charge of the out-patients' department?—Many of them are.

7410. They are not instructed, and have had no experience in salvarsan. Do you think they would keep the cases there, or would send them on to somebody who was able to administer that treatment?—I think all my colleagues are competent to administer salvarsan. Of course, if you mean the junior resident officers, that is quite a different thing.

7411. No, I mean assistant surgeons?—I think what you are really driving at is that there ought to be a department for the treatment of venereal diseases with someone who is highly competent in charge of it. On that I am entirely with you.

7412. Then as to these men who cannot be admitted to Rochester Row, you say they are recommended to have no local treatment; but if admission to the hospital is out of the question, then I suppose local treatment would be administered by the divisional surgeons?—The divisional surgeon does what he can for them, failing admission to some other hospital.

7413. Then one question as to the prevalence of gonorrhœa. I take it, owing to the way in which it can be concealed, any figures on that point would be of very little value?—Yes, I think so.

7414. As regards your own hospital, is there a special department for the treatment of venereal diseases?—They have commenced a small out-patients' department; but I think it cannot be looked upon as a department at present from my point of view.

7415. Are they opening wards for the purpose?—No.

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7416. I heard remarks to that effect; that they were going to have a special department for the treatment of these things?—It is possible, but things move very slowly in London.

7417. But you are in favour of a general department in charge of some man specially skilled in that branch of the work?—Yes; I am absolutely in favour of that, and I should object to a special department that was not placed in charge of a man who knows all about the subject which that special department is designed to treat.

(*Sir Almeric FitzRoy.*) I have no question.

7418. (*Sir Kenelm Digby.*) You gave the number of police at present all told at about 22,000?—Yes.

7419. You have been there only a year and a half?—Yes.

7420. Do you know that that number has increased very rapidly of late years?—The increase from 16,000 to 21,000, or something like those figures, is due to the normal increase which takes place every year and to the 1,600 additional officers sanctioned by the Secretary of State in order to give the men one day rest in seven.

7421. That was one of the great reasons for the addition to the force?—Yes.

7422. As you say, certainly about 10 years ago it was about 16,000. I do not know how long it continued at that figure?—Yes, that is so. There is a normal increase of several hundreds a year.

7423. Still, there has been this great increase, and of course every increase of the force raises to some extent the difficulties. I mean it is more difficult to keep up the same standard with a very large force than it is with a small one?—I think we have had no difficulty at all, because commissions to select recruits go all over the country.

7424. I think there has been very little difficulty; but still you must expect, if you take figures such as you have given us here, a somewhat large increase in the proportion of any particular disease such as syphilis, when you have a very much larger number of men in the force?—Certainly.

7425. I suppose you are familiar with the present police stations?—I have not visited all of them. They extend from Epsom to Cheshunt, and from Staines to Erith.

7426. You know as a matter of fact that there was a great reconstruction of the police stations a few years ago?—Yes.

7427. The unmarried men are in large police stations, or section houses as they are called?—Yes.

7428. Has there not been a very great improvement of late years in the accommodation in the way of provision of recreation rooms, billiard rooms, and things of that sort, which did not exist in the older stations?—Yes, that is so.

7429. Have you heard the same sort of thing, as in the army, has had a good effect?—I think it must have had.

7430. You say you cannot give us any figures at all as to the proportion between married and unmarried men?—I can let you have those figures.

7431. There is provision for a very large number of married quarters for married men?—Yes; there is no objection to the men getting married.

(*Mrs. Creighton.*) In giving these figures, may we also have the number of men married of those that are admitted to hospital?

7432. (*Chairman.*) Could you furnish us with that return?—Do you mean of those who have had syphilis?

(*Chairman.*) The number of married men included in the return of syphilitic cases.

7433. (*Sir Kenelm Digby.*) With regard to recruits, if you find the presence of these diseases or signs of these diseases, do you regard it as a disqualification?—Signs of these diseases, certainly. A record of a man having had gonorrhœa 10 years before or anything of that sort, would be considered, but it would not necessarily reject a man for that.

7434. It would be an element in considering whether they would accept him or not?—Yes.

7435. With regard to the immediate notification by a man to the divisional surgeon of venereal disease, I

understood you to say in reply to Mrs. Creighton that there is no rule on the subject. There is nothing in the police orders about it?—There is a police order that they are to go for all sickness to the divisional surgeon and there is another order that the divisional surgeon is to telephone or the superintendent is to telephone to the military hospital in the case of discovery of venereal disease, so that a man can be immediately sent on that very day to the military hospital.

7436. That is a direction to the divisional surgeon?—Yes.

7437. And that you have every reason to suppose is acted upon?—I am sure it is.

7438. But there is no definite rule making it the duty of the officer who has contracted this disease to go to the divisional surgeon?—No; the rule is that in all cases of sickness the divisional surgeon is to be called in or the officer is to go to the divisional surgeon.

7439. I understood you to say, looking at it from a medical point of view, you would rather deprecate the man being put under any penalty if he did not report?—I think there should be no penalty.

7440. I am not asking you from a disciplinary point of view but from a medical point of view. You do not think it would be effective or more effective?—No; I think the main thing is to publish amongst the men the danger of these diseases—that they should be avoided, but if they contract them treatment should be adopted very promptly. They know now, of course, that they are not in any way penalised.

7441. And that was the main reason, was it not, for the adoption of this new rule?—Undoubtedly.

7442. You can only speak from hearsay as you were not there; but have not you heard it is a fact that there was a great deal of concealment?—Yes.

7443. And these figures in fact show it?—Yes, there was an immense amount of concealment.

7444. I see when you sent them to the Lock Hospital you had in 1904, 4 cases; 9 in 1905; 12 in 1906; 21 in 1907; and 16 in 1908. As soon as the penalty is removed, in the first year you got 27, in the next year 47, in the next year 95, in the next year 195, and in addition 107 cases were re-admitted.

7445. (*Chairman.*) I understand that those early small figures did not include men who went to other than the Lock Hospital?—That is so, only the Lock Hospital and the military hospital.

(*Chairman.*) They are not complete figures.

7446. (*Sir Kenelm Digby.*) Still it represents, does it not, the difference between men who are sent by the divisional surgeon to the Lock Hospital and the men who go elsewhere for treatment?—Yes, that is so. Of course, it only slowly became known and believed in the force that there was no penalty attached to these diseases.

7447. And it had the effect then of increasing very much the proportion of men who did report themselves?—Yes, that is so.

7448. As a matter of fact, do you think the men do get to the military hospital in time?—No, we cannot get enough beds in the military hospital. You see, it is only a military hospital, and we are only there on sufferance. The military authorities, of course, insist on the soldiers having prior claim. We cannot get any beds there; we have tried.

7449. Of those who do get to the military hospital, we were told the other day, and also in the evidence I think, that the police as a rule come later than the soldiers; that they only get them at a later stage. In fact, that appears from your memorandum?—I do not know at what stage the soldiers come; but we send our men on the very day on which we know they are suffering from the disease.

7450. Yes, but the question is whether you know quite early enough?—My memorandum was to urge upon the divisional surgeons the importance of early treatment.

7451. And the divisional surgeons, as far as you know, quite appreciate that?—Yes, I know they do. Of course, when you have nearly 180 doctors, some will be more keen than others in this matter.

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7452. (*Mrs. Creighton.*) May I ask a question here? In your rule that men are to report any case of sickness at once, is there anything said about venereal disease specially?—No, nothing whatever. Venereal disease is now treated amongst the police like all other illnesses.

7453. I simply wanted to know whether there would be any statement about the importance of notifying venereal disease to the divisional surgeon as soon as it appeared?—There is no such notice at present.

7454. (*Sir Kenelm Digby.*) Then we may take it as soon as a man gets to the divisional surgeon, steps are taken that he may be sent to the military hospital at once?—Yes, immediately.

7455. Then if, as a matter of fact, it is the experience that they do come to the military hospital rather later than the soldier patients—that they see them for the first time when the disease is rather more advanced—there seems still to be some sort of reluctance to report to the divisional surgeon?—I think it may be due to ignorance in some measure.

7456. That they do not know enough?—They do not know that they really are infected.

7457. You do not think there is any longer any apprehension at all of the consequences?—I am sure there is not, because I have known men ask to be sent to the military hospital at once. There is no feeling at all about it. They know the great advantages of it.

7458. Of course these things spread very rapidly amongst the police. The men find out very soon where their advantage lies?—Yes.

7459. (*Sir David Brynmor Jones.*) Are you aware of the fact that upon a constable entering upon his duty he is handed a white book containing the regulations not only in regard to his service as constable, but as to his duties?—Yes, I believe that is so.

7460. Have you a copy of that book here?—No, I have not.

7461. Has a new edition of that book been recently issued?—I am afraid I cannot answer that, because that book has nothing to do with me.

7462. I do not quite follow that the book has nothing to do with you; because does it not contain regulations as to the duty of the divisional surgeon and of the Chief Surgeon?—That I am afraid I cannot answer.

7463. Should I not be right then in saying that though the book is handed to the police, it is treated so lightly that not even officers of the police force know what is in it?—I believe the book you refer to has reference to the executive functions of the police in the streets, and so forth; their duties in regard to the public.

7464. The book I am thinking of went a great deal further than that. I may say I was chairman of a Commission some years ago that had to inquire into the way in which the Metropolitan Police discharged their duties in regard to street offences, and almost the first document that was put into the hands of the Commission was this white book?—I am afraid I could not answer that question; I have nothing to do with street offences.

7465. Is that quite clear?—That is quite clear; I think so.

7466. I do not want to be controversial to any duties that you may have to perform, or in regard to yourself; but the importance of the thing from the point of view of this inquiry is, that the duties of the police were pretty clearly laid down in the book handed to us, and I gather since June 1909 certain changes have taken place. Is that the case?—I really cannot tell you. I have nothing to do with the book. I have to do with the medical department of Scotland Yard, not with that book.

7467. I am sorry I was not here before, but I have been detained on a public engagement. In the evidence which you have given you say, "Officers so suffering were regarded as defaulters"—the "so suffering" being suffering from venereal disease—"and were suspended."

That is before June 1909?—Yes, it is all down in my memorandum. The date is mentioned there.

7468. I know. What is your authority for stating that? You state it in your proof apparently?—I am afraid I do not follow you. My authority for stating that is the records of Scotland Yard.

7469. The Chairman has been good enough to hand me a proof of the evidence which you gave. You say: "Prior to June 1909 the cases of venereal disease reported amongst police officers were sent to the Lock Hospital, and officers so suffering were regarded as defaulters and were suspended." What is the authority for that?—Do you mean to say you traverse that statement?

7470. Please do not ask me that question; I am asking you?—Because I say that is on the authority of the records of Scotland Yard.

(*Sir David Brynmor Jones.*) Then I will pursue my inquiries in another way.

7471. (*Chairman.*) I take it that your meaning is that you have nothing whatever to do with the executive orders affecting the ordinary duties of the police?—Nothing whatever.

7472. That your duties only relate to the police in so far as they come under you for some disease or other?—That is so.

7473. And those are all your duties?—That is all my duty.

(*Sir David Brynmor Jones.*) I think one branch of our inquiry is to inquire into the prevalence of the disease, and whether the witness is responsible for anything is not a matter on which I was asking any questions at all.

(*Chairman.*) If you question him on prevalence, that is another matter.

(*Sir David Brynmor Jones.*) That is what I am leading up to.

7474. In your evidence you have referred to a defaulter sheet. Are you aware of the fact that in regard to each constable, there is kept at Scotland Yard a sheet showing his record, not necessarily of any complaints made against him, but of any fines or any censure?—Yes, certainly.

7475. Is it still the case that one of the recognised offences which are put upon a defaulter sheet is that he was seen to be consorting with or showing undue familiarity with prostitutes?—That I cannot answer; that has to do with the executive branch; it has nothing to do with the medical side.

7476. I am only inquiring as to the system. Are you aware of that?—I am not responsible for the system, and I have nothing to do with the executive department of Scotland Yard.

7477. Nothing to do with the executive department?—Except medical questions; and I venture to say consorting with prostitutes is not a medical question.

7478. (*Chairman.*) You regard that as purely one of discipline?—Discipline entirely.

7479. (*Sir David Brynmor Jones.*) Then you do not know whether or not it is an offence to consort with or show undue familiarity with prostitutes?—No, I know nothing about that.

7480. Then I understand that you do not know the ordinary disciplinary system of the Metropolitan Police?—That is so; because I keep myself entirely to my own work, and I do not inquire into those other questions.

7481. I have not the slightest doubt you keep yourself to your work. I am only examining you as to your knowledge, with a view of seeing if I can get some information as to your opinion in regard to the prevalence of these venereal diseases among the Metropolitan Police. I put the question to you because you seem to be misunderstanding my attitude. Is it in your experience from 1909, the fact that the police are afraid to admit they are suffering from a venereal disease lest it should provoke an inquiry whether they have been consorting with prostitutes?—I do not think they are at all afraid of reporting venereal disease, because the Commissioner has made it perfectly clear that since May 1911 they would not be suspended or penalised in any way.

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7482. How did he make that known?—I was not Chief Surgeon then, so I cannot answer that.

(*Sir David Brynmor Jones.*) Then who is your informant?

(*Chairman.*) I suppose there are standing orders of the force that you have not access to?

(*Sir David Brynmor Jones.*) He does not know; he has said so.

(*Chairman.*) But you see this particular order he refers to here would affect him, and, therefore, would be noted in his office.

(*Sir David Brynmor Jones.*) It is not for me to express an opinion, because I am simply examining a highly placed official; but the white book I have referred to contains every information about the police. I daresay alterations are made from time to time, and I should have thought when the witness was made Chief Surgeon the first thing any sensible organisation would have done would have been to give a white book to him, because the duties of the Chief Surgeon and the divisional surgeon are all specified in the book.

7483. At any rate, so far as our inquiry is concerned, and I am making no attack on the police system, or upon you, far from it, all I want to know is this: whether (as anybody with the evidence before them in 1908 would have inferred) the police now are, as they were naturally, nervous about saying they have a venereal disease because of the stern discipline maintained over it in regard to prostitutes in the streets?—That was undoubtedly so.

7484. This is what I suggest to you: that no medical statistics before the order you referred to could possibly give any clue to the prevalence of venereal diseases in the force of 18,000 men as it was then?—That is quite true.

7485. As I understand, there is this stoppage of 1s. a day except when the officers are in the military hospital?—Yes; in the military hospital there is a charge of 2s. a day for maintenance, and 6s. for each administration of salvarsan.

7486. Supposing a man is suffering from pneumonia, or a cold, or influenza, or something of that kind, and he reports himself, and is allowed to go off duty, is there any stoppage of pay for that?—All those who are sick are stopped 1s. a day.

7487. All?—Except those who are hurt on duty.

7488. That is to say, cases of wounding or shock to the nervous system, owing to very violent action in preserving the peace?—Anything that can be put down to duty is put down to duty, and the man has full pay.

7489. In pneumonia or some other disease of that kind, which seems to be due to night duty?—In pneumonia a man would be sent to hospital, and he would be stopped 1s. a day.

7490. I see that you cite an order as to venereal disease; "Police certified by the divisional surgeon to be suffering from venereal disease will be sent to the military hospital, Rochester Row." When was that order made?—About a year ago.

7491. Have you during your experience as Chief Surgeon to the police formed any opinion on the question as to whether the police as a whole are suffering to any large extent from venereal diseases?—No; I have not the proportion to other groups of men; it is quite a small extent.

7492. No special case has come under your notice to make you think the police are worse than any of the other citizens of the metropolis with regard to consorting with prostitutes, or anything of the kind?—I should think they were better than any of the others.

(*Sir John Collie.*) I was not here at the examination in chief, so I will not ask any questions, my Lord.

7493. (*Rev. J. Scott Lidgett.*) I understand at present, sick members of the force do suffer disadvantage from the inadequacy of the accommodation for the treatment of these diseases?—Undoubtedly.

7494. In order to remedy that, would you prefer to rely upon increased accommodation for the general population in which the police would share, or would you advocate special provision for the force?—There are many arguments on both sides, and I am myself rather inclined to be in favour of special provision for the force.

7495. Will you state the grounds?—On the grounds that, of course, we should be able to control the beds.

7496. (*Chairman.*) We may take it, of course, that the police is a very specially selected body of men physically?—They are specially selected. At least 75 per cent. of the candidates are rejected.

7497. And their general health is probably far above the average of the population?—Undoubtedly.

7498. Following a question of Canon Horsley's, I should like to ask you if the men change their division constantly, or are they kept for a long period in a particular division?—If they are promoted they are always changed; because when a man is promoted, if he remain in the same division he would be put over the men with whom he had been living in the junior rank, which is not thought advisable. So whenever a man is promoted he is moved to another division.

7499. So that the incidence of venereal disease among the police of particular divisions would not give a measure probably of the morality of the general population in that division?—I should think not.

7500. Have you seen the cards which are given by the military officers from the military hospital to soldiers who are infected?—No, not for soldiers.

7501. Would it be possible to recommend to the Commissioner that every man who joins the police force should have one of those, or something like it, given to him on joining?—I am sure the Commissioner would be glad to do anything that would help to save the men from these diseases.

7502. Could you, in your position of Chief Surgeon, make that recommendation to him?—I should like to see the card first.

7503. I think you said, in reply to Mr. Snowden, that the results of salvarsan were wonderful. I suppose you meant by that the rapid results in checking the advance of the disease?—The results during the first two years.

7504. There has been nothing like that obtained by other treatment?—No.

7505. Then with regard to relapses, about which Mr. Snowden questioned you, I suppose we may take it there would not be any probability of any large number of relapsed men after treatment in the military hospital?—I think probably not, because they are watched for two years. They attend the hospital for two years, and have a blood test, and they are not lost sight of for two years.

7506. They are kept under observation?—Yes, that is a very important item in complete cure.

7507. So that it is not very probable that many more relapses should take place than those you have given us in your paper?—I think not, except that there may be a few. But we do not know about that yet. We shall not know about complete cures till years have elapsed after the primary treatment has been carried out.

(*Chairman.*) Thank you very much.

The witness withdrew.

Mr. ROBERT FRANKS RICHARDSON called and examined.

7508. (*Chairman.*) Dr. Richardson, what degrees or diplomas do you hold?—M.D. Cincinnati, U.S.A.

7509. How long is the degree course for Cincinnati?—At the present time four years.

7510. Are you a member of the National Association of Medical Herbalists of Great Britain?—I am.

7511. Do you represent the views of that association before the Commission?—I do.

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[Continued.]

7512. Will you tell the Commission what are the objects for which that association has been constituted?—For the purpose of practising herbal treatment and studying medicine other than that known as allopathy.

7513. How many members does the association consist of?—I could not say just at this moment; I have not the statistics.

7514. Can you give us any idea of the size of the association? I think Mr. Marlow is president of the association. Can you say how many you have?—Somewhere about 200, I believe.

7515. What are the conditions of the membership of the association?—Examination.

7516. Held by the association?—By the association.

7517. Then as a result of the successful examination, does the association give any diploma to its members?—It does.

7518. Does that diploma qualify its members to practice in England?—For herbal treatment, yes.

7519. What subjects does this examination cover?—The usual curriculum; anatomy, physiology, pathology, *materia medica*, and the practice of medicine. Our test-books are based on that of similar colleges in the United States.

7520. I understand the association does not give any training. Anyone can come to you and pass this examination and get the diploma of the association?—Not unless they pass the herbal examination, as it were, or been trained under a herbal system. There is an apprenticeship.

7521. What does the apprenticeship consist of?—The usual training.

7522. Where is the usual training given?—There are lectures given at the college at Southport. Then there is the practitioners' training inclusive.

7523. How long does the course of training last?—Five to seven years training.

7524. At a college?—No, not at a college; but it must be with a practitioner, the same as it was with allopaths years ago. Four years used to be sufficient for them.

7525. I do not quite understand. Is there no regularised place where the course of a herbalist's medical training is given?—Yes. Herbalists as a rule are trained by the parents. He is the son of a father, and he goes on in that way. That is so at present. Then of course he attends lectures at any college, a university college, locally or otherwise, so long as he acquires the necessary knowledge to practise medicine.

7526. Then you admit to your examinations anybody who thinks he can pass them?—Oh, no; we should have to have *bonâ fide* proof that he possessed the knowledge.

7527. But the proof would be given by the examination, would it not?—Yes; that is the same with all colleges—proof by examination, no matter where the man may attend. A medical student may attend two or three universities or hospitals and then go before the Apothecaries' Society, we will say, and, as long as he satisfied that board of examiners, he can practice medicine and surgery. Of course, it is all right, and the board of examiners issue their certificates. He is a licentiate of that Apothecaries' Society.

7528. What other points besides the passing of the examination do you insist upon for the candidates you admit to your examination?—We insist upon an efficient knowledge of medicine and surgery, and to be properly equipped with that knowledge so that he shall successfully practise the same.

7529. You insist on that, I understand, in the form of an examination?—He must possess the knowledge.

7530. Before he is admitted to the examination?—Yes, decidedly.

7531. How do you know he has the training until he has been brought to the test of your examination? Of course, no board of examiners would have any knowledge. He presents himself for examination; he applies to be examined, and he states his training. That is after the age of 21.

7532. He states the amount of training he has had?—Yes.

7533. And you examine his statement as to his training, and then you say whether he is fit or not to be admitted to your examination; is that it?—That is so.

7534. Do the herbalists confine their treatment entirely to the use of vegetable drugs?—Invariably.

7535. Entirely?—No, not entirely; because there are salts of the constitution such as potash and soda, which are essential, or iron in an anæmic condition.

7536. Then you admit metallic and other compounds among your medicines?—Yes, where necessary; where they are indicated.

7537. Then your system is not one purely of herbalism?—It is a name given to the medical sect. You might term it the same as in the States, the eclectics, where they use drugs different to that of an allopath where they are indicated, and it is because of the difference between these two systems of medicine that the name is attached. So far as the curriculum is concerned, physiology, pathology, *materia medica*, the practice of medicine and surgery are the same. It is only in the using of the drugs that we differ from the allopath. We do not use such poisonous minerals as mercury and arsenic.

7538. Then you hold yourself free to employ any drug that you like?—Yes, that is our privilege.

7539. But you reject certain drugs which allopaths approve of?—Which we have proved are deleterious.

7540. Which you think are deleterious?—Decidedly.

7541. Then you are not herbalists in any distinctive sense?—We are herbalists by name and sect.

7542. But you merely select different drugs to those allopaths use?—Yes, different drugs.

7543. What are your methods of diagnosis for syphilis?—That of a vegetable treatment.

7544. I do not want treatment; I want to know how you diagnose syphilis?—The usual text-books. I suppose you mean the nature of the sore; the induration—the true Hunterian chancre; is that what you mean?

7545. I want to know how you distinguish a syphilitic sore from any sore?—By its indurated base; that is a true Hunterian chancre.

7546. How can you distinguish between a syphilitic chancre and another sore; that is what I want to know?—By that particular condition; it is of an indurated character.

7547. By its appearance, therefore?—Yes.

7548. By its appearance solely?—No; there is the cell tissues and the change in the structure of the part. There is a difference between an indurated chancre and a soft chancre, we will say. One is shallow, as it is termed, and the other is indurated. In fact, we will say there is an indiarubber feeling that it gives to the touch, or anything like that, which an ordinary ulcer would not give.

(Mr. Lane.) Might I point out that very often a simple ulcer has an indurated base, and it cannot be diagnosed from a syphilitic sore?

7549. (Chairman.) What I am getting at is, that the diagnosis is one by appearance or feeling?—That is so; by the usual symptoms, as given in medical text-books relative to the same.

7550. Do you make any use of the microscope?—No.

7551. Are you conversant with the Wassermann test applied to the blood system?—Yes, I am acquainted with it; I have the text-books.

7552. Have you made use of it?—No, I have not.

7553. Do you believe in it?—The salvarsan test?

7554. No, the Wassermann test of the blood serum?—It may be correct. I have not tested it.

7555. You have never made use of it?—No, I have not.

7556. Though you have read about it in books, you do not think it is of any medical value?—Yes, it is. It has value so far as as finding the microbe, the *spirochæte pallida*. It would distinguish that no doubt.

7557. But you do not think it is worth while to use it for diagnosis?—You put the question. I have not used it because I have not found it of that importance.

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[Continued.]

For instance, take those that have come under me. I have been through all this process, and yet this test has been a failure absolutely. So why go on with failures when there are better ways of dealing with it?

7558. Then you reject the test?—No, I do not reject it. I say I do not find it serviceable.

7559. You reject it from your practice at all events?—Decidedly.

7560. You do not use it in your practice?—No, I do not; I do not say it is not so.

7561. I do not quite understand; please listen to my question. You do not use this test in your practice, because you say you have come to the conclusion that it is not a valid test?—It has its value, no doubt.

7562. But if it has its value, why do you not use it?—It might be of value, say, in the army or navy; but to put it constantly into private practice—well!

7563. Is the disease not the same in the case of civilians;?—It is the same; but my experience with those who have been under this mercurial treatment, and gone through all this test, is that it has been a failure, and if it is a failure why resort to things which are failures?

7564. Then we take it from you that you view this test as a failure, and not worth using?—There are things superior to it.

7565. We will let it stop there. What are the superior tests to the Wassermann test?—The remedies that are employed in treating the disease.

7566. I want a test for the disease; diagnosis, not the treatment at present?—It just depends on the stage—the primary, secondary, or tertiary. You get used to those various conditions. A man has been under treatment, and there are various things come out at the stage he is supposed to be cured; we will say the second stage for instance, a tongue ulcer appears, or other conditions, an indurated gland, and all those kinds of things connected with the complaint.

7567. Then you have come to the conclusion that clinical observation is superior to a test such as the Wassermann test?—I should not like to say it has not its value; I am not saying that; but it has not its value as far as cure is concerned. You see in private practice to have this always the test the same as in the army—it is different altogether.

7568. I am afraid that is beyond me altogether. The disease is the same in all human beings, I take it, whether the man is soldier, sailor, or civilian. Therefore, any test which is faulty in the case of a soldier must be equally faulty in the case of the civilian?—I have not put it to the test; I have not investigated in that direction.

7569. You have not done it?—Only in theory.

7570. You have read about it in books?—Yes, the latest books about it I am acquainted with.

7571. Do you accept as a body the bacterial theory of disease?—I should hardly say we, as a body.

7572. Do any of them accept it?—Yes, there is no doubt about it.

7563. And act upon it?—Yes, some do.

7574. You referred just now to the spirochæte in the case of syphilis?—Yes.

7575. You are aware of the spirochæte. Do you consider that a necessary concomitant of the disease?—That is so; I believe it to be so.

7576. Therefore if you could discover it, it is a very good help to diagnosis?—I admit as diagnosis it would be a help.

7577. But I think you said you did not make use of the microscope, and therefore you could not discover the spirochæte?—I have not investigated it with a microscope; but I admit it may be of utility.

7578. You think the microscope might be of some utility?—Yes.

7579. Will you tell the Commission what your treatment of syphilis without mercury or arsenic consists of?—I have just dotted down perhaps half a dozen cases.

7580. I do not want cases; I want you to tell us if a case of primary syphilis came before you what treatment you would give to that case?—Any of the usual remedies that are known in our works.

7581. What are the usual remedies?—Stillingiea, Phytolacca, &c.

7582. Is that delivered internally, externally, or what?—Internally. There might be half a dozen remedies.

7583. Does your experience show that these remedies are effective?—Most decidedly they are.

7584. Can you give statistics of the results of these cases in curing or checking the disease?—I have jotted down a few clinical cases extending from one degree to another relative to it.

7585. Let us have one case giving the course the treatment went?—I will refer to one case that had been under allopathic treatment, a male tertiary form. He was three years under allopathic treatment. His system was thoroughly devitalised owing to the mercurial treatment. Mind you, I am not speaking against it, because I have used mercury myself.

7586. I want to know what your treatment is?—In this case the treatment was confined to Stillingiea, Phytolacca.

7587. You gave this remedy at the tertiary stage of this case?—Yes.

7588. What happened?—The treatment commenced on 14th October and terminated on 20th January.

7589. Had all the symptoms then disappeared?—Entirely.

7590. Do you discriminate between acquired and congenital syphilis?—Can I discriminate, do you say?

7591. Do you in your practice?—Yes.

7592. Do you make any difference in your treatment?—No, the same drugs are employed. It seems to kill the microbe as far as I understand, or, as you put it, the *spirochæta pallida*.

7593. Are you conversant with the results that have been obtained by the use of salvarsan?—I have not practised salvarsan.

7594. You reject salvarsan because it is a preparation of arsenic?—I reject it because of the patients that have been under it and have not been cured.

7595. Then from what you have read of salvarsan you have come to the conclusion that it is no use?—Both mercury and arsenic are not to be relied on as a specific treatment. That is my experience.

7596. And that your own treatment gives you better results than any other that have been obtained by salvarsan?—Decidedly.

7597. How do you diagnose gonorrhœa?—By a discharge.

7598. But there are many cases, are there not, where there is no discharge?—Yes; there is a form now and then that will present itself in that way, very rarely though.

7599. You are aware of the discovery of the gonococcus?—I am.

7600. Do you look for that?—No.

7601. Never?—No.

7602. Do you think that the gonococcus is connected with gonorrhœa or not?—It is.

7603. And therefore that again would be rather important from the point of view of diagnosis, would it not?—Yes, I should say it would. If one had to deal continually, you might say, with cases of gonorrhœa, the same as in the army or navy or anything of that kind, I should do it.

7604. What is your treatment of gonorrhœa?—It varies according to the condition of the constitution—sandal wood, copaiba, cubebs, Kava Kava, &c. If it is in an inflammatory stage—sometimes it is orchitis, you might say—then you have to use inflammatory remedies and reduce that and that is where the discharge is shut up.

7605. What drugs do you use in those cases?—For inflammatory condition you use aconite and gelsemium in minimum doses. There is quite a difference in using it in large doses. Of course, there are often complications even with gonorrhœas that I have had that have been under allopath treatment and have been under it a year when prostaticitis has ensued, we will say. That is when some of the bacillus, you may say if you try to search for it, has invaded the tissues and channels. You may waste your time in trying to find them, but the disease bursts out afresh.

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[Continued.]

7606. What diseases do you regard as being directly or indirectly attributable to syphilis?—What disease?

7607. What other diseases do you regard as directly or indirectly attributable to syphilis?—Do you mean what effect has syphilis on the constitution that allows it to be invaded by other diseases, would you say?

7608. Put it that way if you like. The results may be direct or indirect. What diseases do you associate with a syphilitic taint?—I should say tuberculosis would be one, pneumonia, nephritis. Then there is rheumatoid arthritis and iritis. I suppose that is what you are referring to.

7609. Quite. Do you attribute mental cases to syphilis also? I should say that, and I have every reason to think that the microbe invades both the brain and the spinal column very much. You find paralysis following in people who have been tainted with syphilis. It is hard to say directly, but indirectly you surmise. For instance, I have a case in hand at the present time of Bright's Disease. As soon as I put him on syphilitic remedies the treatment proved beneficial.

7610. Then in the case of mental diseases, would you give your anti-syphilitic drug?—Decidedly so. There is only one thing, that is to wipe out the whole colony of them wherever they appear and in whatever condition.

7611. In any case of mental disease, even if you had not any evidence of syphilis being the cause, you would still give the anti-syphilitic doses?—No; I should have no need to do that. I should give what is indicated; say congestion of the brain, I should give the drugs indicated for it. Say it was inflammation, nephritis, we should have a special remedy for it.

7612. How would you discriminate between cases which were syphilitic in origin and those which were not?—If I had any doubt or seemed to think there might be something lurking, as I had a case three weeks since, I put on syphilitic treatment and improvement commenced. But I had not the audacity to insinuate there had been syphilis in that family before. You can understand that in private practice.

7613. Then your principle is if there is any doubt —?—I just give one or two bottles of this anti-syphilitic treatment and it would manifest itself promptly.

7614. Do you consider the effects on public health are serious?—Most decidedly, especially females. It is bad enough with males, as far as that is concerned.

7615. In your letter to Mr. Burdon, you say you have practised both the allopathic and the herbal systems?—Yes.

7616. Do you mean you practise both of them now, or have you given up one and taken up the other?—The herbal is the best.

7617. Then you have now given up the allopathic system?—Yes, to all intents and purposes.

7618. How long did you practise allopathy pure and simple?—For five years.

7619. And you gave it up in favour of the herbal system?—Finally; it was superior.

7620. And now you confine yourself strictly to the herbal system?—Absolutely.

7621. (*Sir Almeric FitzRoy.*) You are not entitled to registration as a medical practitioner in this country, are you?—I would be under the 1886 Act, if reciprocity existed between here and the United States.

7622. You say you would be; but of course Part 2 of the Medical Act of 1886 has not been applied to the United States?—It has not.

7623. Do you know that the General Medical Council do not recognise any diploma based upon a four years curriculum?—I am not asking them to recognise mine at all.

7624. No; but you stated your diploma was based on a four years' course, did you not?—Yes; that is the American standard at the present time.

7625. That is you are incapable of being recognised by the General Medical Council, and, therefore, if reciprocity were applied to America to-morrow, your

title could not be registered?—No; that has nothing to do with it.

7626. On the contrary, it has everything to do with it?—On the contrary, if you will read the Act, it reads differently.

7627. I happen to know that it is so?—I am here as a herbal practitioner; I am not here as an allopath.

7628. I was asking you about your medical qualifications as an allopath?—Yes; it is under the herbal system I have the right to-day.

7629. Quite so. I put to you the question in order to test your pretensions and am quite satisfied with your reply?—I do not think it was a question which was necessary.

7630. Are you the Mr. Richardson who, some years ago wrote to the Lord President of the Council?—That is so.

7631. Do you remember in that letter you described herbalism as one of the subjects which require a great deal of explanation?—That was relative perhaps to an interview which could not be covered in the letter.

7632. I think, after the extent to which your examination has proceeded, that opinion will be shared by all who have heard you?—The letter was written in reference, I believe, to an interview respecting a charter.

7633. That was one of the subjects?—Yes, I believe that was so: and consequently you can easily understand that one could not express all in the letter.

7634. Is not the interest felt in certain quarters in herbalism largely due to the fact that among herbalists there are very many estimable and active politicians?—I am not aware of it.

7635. You are not aware that certain gentlemen look upon the medical profession as a hotbed of privilege and greed?—No, I am not aware it is so.

7636. You do not remember, then, that in that letter which I referred to just now, this paragraph occurs: "The allopath doctors not being satisfied " with the Medical Acts which give them legal power " to practice medicine as public servants, their greed " for power and gain is so great, that they are about " to introduce into Parliament a medical Act, which, if " passed, would give them complete monopoly, and " deny citizens the right to practise"?—It is quite true. I repeat that at present.

7637. Are you aware that no such intention ever existed?—Am I aware?

7638. Yes?—I take the British Medical Journal as the authority for it at the time.

7639. Do you take all your opinions from the press?—It was that which was presented at the time, anyway, under discussion, and if you take the organ of the party, you naturally suppose it will not be an untruth. If I am mistaken, it is because I can only explain I read it there.

7640. May I ask you, is it not the case that what the herbalists, really want is some formal recognition which will make it more difficult for the public to judge between those who are qualified to practise medicine and those who are not so qualified?—That is so. We are desirous of having a charter, the same as other medical colleges which practise a different system of medicine, and the merits and demerits of our treatment will be best judged by the patients.

7641. In short, what you want is to set up a rival system of therapeutics?—No, not a rival system at all. We want to be of service to the public.

7642. But you have described your system as a rival system?—No.

7643. Then if that is not so, I am afraid I do not understand the English language?—It is your construction of the use of the word "rival." We want the people who prefer the herbal treatment to that of the allopaths to have it; that is all, and naturally they seek us as the channel to receive the same.

7644. Have you any recollection of the Royal Commission on the Medical Acts which sat in the year 1882?—I have not.

7645. You were not in this country at that time?—I was.

7646. You have never referred to the report of that Commission?—If you read it.

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[Continued.]

7647. I was going to ask you whether you knew that in paragraph 66 of that report it is stated that "The National Association of Medical Herbalists," that. I presume, is your association?—Yes.

7648. — "presented a petition on behalf of the members of the Association to appear before us in their behalf. We are unable to recognise the justice of their demands, which strike at the principle of the Medical Act of 1858 by seeking to extend to unregistered persons all legal rights and privileges of registered persons"?—Yes, quite so.

7649. That was the opinion of the Royal Commission?—Just so. They preferred the allopathic practice only for the public.

7650. But in this same letter to the Lord President, do you remember saying: "Let a Royal Commission be appointed to receive evidence as to the defective system of allopathy, and the evidence will be startling in the extreme"?—Decidedly.

7651. You see that a royal commission, only 20 years prior to that, had looked into these matters, and, instead of condemning the allopathic systems, dismissed the claims of herbalists in the sentence I have just quoted?—Yes, because they were ignorant of the treatment of other systems. I find very few allopaths acquainted with the other. You know your own books here on allopathic treatment—I presume you are a doctor, by the way you are speaking. Take Robert's Practice of Medicine. I suppose you know that. He is one of the best men in London. As an allopathic book, it is right, but it is not superior to the herbal medical text books. That is personal experience.

7652. I understand you to contend that the Herbalists Society is the sole depository of medical knowledge?—No, not that. I maintain this, that the people have a perfect right to call in that medical man of any particular system of medicine which suits them best, and if they find a herbal practitioner can suit their purposes, they have a perfect right to have him, and not a compulsory treatment which is at present pressed upon them in the shape of this Insurance Act. Day after day I have panel patients coming to me. They want their freedom. Why should you want to put them down?

7653. Whatever the Society of Herbalists may think of themselves, is it not the case that their range of research is restricted, and their scheme of therapeutics obsolete?—Take King's American Dispensatory, and I would like to show you either Wood's Materia Medica, or, we will say, the Pharmaceutical Codex, and make comparisons with it.

7654. Those are the authorities?—Yes, that is an authority.

7655. Would it be correct to say that herbalism arises out of a mere empirical recognition of the fact that certain herbs produce certain effects?—That is so. Take, for instance, one specific remedy, mouseear herb. This is a specific for whooping cough. I use no other remedy than that. Take your death rate. I should think I know of 300 cases treated with that remedy without a single death, and that is what the allopathic treatment cannot bear out in proportion.

7656. To take that point a little further, is not the next step the manipulation of the herb to render it a serviceable drug? Is it not at that point that herbalism ends and pharmacy begins?—I do not quite understand.

7657. I say after the first empirical recognition of the effect of certain herbs, the manipulation of the herb to render it a serviceable drug follows, and then herbalism ends and pharmacy begins?—No, we are pharmacists. There is Lloyds, Warrens, and of course, Parke Davis, and Potter and Clarke, who supply herbal remedies. They are thoroughly analysed, and we are thoroughly conversant with all their qualities, the same as the allopaths.

7658. Then do you dispute that the effect of herbalism as a system is to stereotype the inchoate stage of pharmaceutical knowledge and to retard the development of medicine?—They develop it in a different way. We use a drug as indicated. Take, for instance, belladonna, we will say, in the Pharmacopoeia.

If I were impertinent, I should ask a question, when would you use it, and you would say you would use it when you thought fit; but we have the indication in our text books. Take gelsemium, as an illustration. I read once of a person being nearly killed because he was treated with gelsemium for neuralgia. As it was not the indication, I wrote to the British Medical Journal, and asked them about it, but they did not see fit to put it in.

7659. May I sum up your system by the description that while the range of your observation is small, the area of your conjectures is vast?—No. Take our hospital statistics in America. We have there one third less death rate. I think that is quite enough. That is the practice. That is where a public institution does not favour any system of medicine. There are 26,000 eclectic herbal practitioners in the United States. That shows they must be of some utility to the public. They are not all small circumstances and large areas.

7660. (Mr. Ernest Lane.) Is your system taught in the hospital at Cincinnati?—No, at our own college. Say St. Thomas's or St. Bartholomew's here. All students will attend, either allopaths, homeopaths or herbal practitioners, at clinics; and lectures are given at their own college.

7661. Then am I to understand you learn herbalism afterwards, or is there a school of herbalists?—There are three colleges in the States.

7662. Is that recognised in this country?—Decidedly. There are some of them on the Medical Register here. They have passed the examination and registered here.

7663. Are they practising as herbalists?—Yes, the eclectic system.

7664. You have a very wide practice, I take it?—Fairly wide.

7665. I believe it is in Nottingham?—Yes. I have some of the leading citizens as my patients in Nottingham.

7666. But it is at Nottingham that you are practising?—It is.

7667. Do you have any serious cases?—At times.

7668. Dangerous illnesses?—Decidedly.

7669. And they all recover?—I did not say they do.

7670. Who writes the death certificate?—If they are poorly, they have an allopath in. He is no good, and if I bring a patient round, it is all right; but if there is no chance, I give him a chance of getting his death certificate.

7671. You say an allopath is no good?—That is what he is in many cases.

7672. Then he is covering you?—No, he is paid; he is called in. He is a public servant.

7673. But he is covering you. He is called in to sign a certificate as to the death of the patient?—No. I had a case a little while back with two allopaths of a man who was given large doses of chloral and bromide of potassium which, as reported, half killed him with these powerful drugs, in the case of insomnia, yet under the herbal treatment the man got rest.

7674. I only wanted to know what your association with an allopath was. You call him in to sign a death certificate?—No, I know my diagnosis is such that I can generally tell.

7675. Coming to the question of the knowledge of medicine and surgery of you herbalists, what is the nature of the examination?—We have the form.

7676. I do not want the form. Just give me some idea?—It is in pathology, histology, chemistry, biology, and anatomy, and always the usual curriculum, the same as the allopaths.

7677. Where do they learn the others?—The usual text books.

7678. Do they dissect?—Yes.

7679. Where do they dissect?—Animals; that is all they have.

7680. All the knowledge of anatomy is comparative?—Yes, that is all they have at present.

7681. It is very useful for surgery?—There are the anatomical charts, and they, of course, give a full description of the human body.

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[Continued.]

7682. If you are dissecting an animal, can you make a post-mortem?—I am not saying that at all.

7683. That is the inference; that you can operate on the human body?—They have a knowledge of anatomy through that and the charts in connection therewith.

7684. But I say, as an anatomical teacher in the past, that such a knowledge is absolutely useless as regards the human frame?—I quite admit they ought to have proper instruction, and that is why we were anxious to get a charter; but the allopaths stopped it. We want a charter to give them theory instruction in every department of medicine and surgery.

7685. Do you do any practical surgery?—I have very little, as far as that is concerned.

7686. Any operating?—No, there is no demand for it.

7687. No cases of cancer?—Yes, I have cases of cancer.

7688. Are you a cancer curer?—No, I wish I were—nor are allopaths, as far as that is concerned.

7689. There is a certain section of herbalists who call themselves cancer curers?—A member of our council has cured cancer.

7690. Has he?—Yes, he has.

7691. With herbs?—Yes, with herbs; and I almost might say that I have varied forms of cancer that I myself have cured, but I am not sufficiently sure of saying cancer is curable. You see one does not want to laudate oneself; but I have had cases of pronounced cancer which have been cured.

7692. How are they diagnosed? You have not a microscope, have you?—No.

7693. How do you diagnose cancer?—By the invading of the tissues.

7694. Then it is a perfectly simple thing to diagnose cancer?—Of course it is.

7695. There is no difficulty in the case of cancer of the tongue, for instance? You could not possibly mistake it for anything else?—Yes.

7696. Then there is some difficulty?—Decidedly.

7697. For instance, cancer of the breast. Is that perfectly easy to diagnose?—It depends what form.

7698. What cancers of the breast are there? I think you mentioned schirrus. Do you know any other form?—Yes.

7699. What?—There is colloid.

7700. It may be colloid degeneration. You do not know any other form?—Yes. I have not a list of them at my fingers' ends at a moment.

7701. But you can easily diagnose them?—I have generally diagnosed them, even when there has been growths in the bladder. I had a case only recently.

7702. You diagnosed it?—Yes, and the cause of death, when it followed, was given. The primary cause was cancer.

7703. Did you treat it with herbs?—Yes.

7704. But you called in the allopath for the death certificate?—I tried herbal treatment, and I said there was no more to be done, and so did the allopath.

7705. Then we will leave the question of general surgery, and come to your special experience in venereal diseases. I suppose you are a witness to this Commission on account of your particular knowledge of that subject?—Not necessarily. It is because we practise a different system of medicine.

7706. But this is a Commission to consider the treatment and prevalence of venereal disease?—It is.

7707. And you have offered yourself as a witness, and I presume you are ready to answer questions?—That is so.

7708. What is your experience of venereal disease? Do you have much of it in your private practice?—Yes, I get many cases.

7709. Of course you consider yourself quite competent to treat any case of venereal disease?—I should say so.

7710. I believe you do not take advantage of some of the more recent discoveries. Of course you know of Ehrlich's recent discoveries?—No, not what allopaths use.

7711. You have never heard of salvarsan, then?—Yes, I have.

7712. Then, if you have heard of salvarsan, you must have heard of Ehrlich?—As far as their text books are concerned, I am conversant with it, only not perhaps the name you mention.

7713. Then you know of Schaudinn's discovery. Anyone competent to treat syphilis must know of a discovery by Schaudinn in 1905?—It might be in the text books; I do not know the name without referring to it. I have it with me.

7714. You do not know, then, what Schaudinn's discovery was?—No, I cannot say that I do.

7715. It is rather an important era?—If you mention it, I might say I have heard of it, if you wish to elucidate any idea.

7716. It is very easy to elucidate the idea. Schaudinn, you may be surprised to hear, discovered a germ that we call *spirochæta pallida*, but you call it the *pallida*. I suppose you are familiar with Mecthnikoff's discovery in syphilis?—I read that other gentleman's remarks, now you have mentioned it; but I could not remember the name.

7717. You do not remember any question of the inoculation of monkeys?—Yes, it is in this book.

7718. It is all in this book?—Yes. It is published by the Oxford.

7719. You do not seem to have a great memory for names?—No; but I know what it includes, and all the inoculations. It is not so much a matter of remembering the names, nor was I prepared for them. Because these men have made discoveries and found a germ, which is very useful, no doubt, that does not alter the barbarous treatment they suggest for it.

7720. You say you diagnose a sore by its feel?—In some cases I should.

7721. And I suppose you have come across lots of cases of soft chancre, in which irritating applications have been applied, and in which induration is present to just the same extent as in what you called a Hunterian chancre?—It is so.

7722. How do you diagnose that?—Because one is not so deep as the other, and does not take possession of the tissues so much as the other.

7723. Is that so?—That is my experience.

7724. Which is the deep one?—The indurated.

7725. The indurated one is the deep one?—Yes, it takes possession. There is more induration with the true chancre.

7726. Induration and ulceration are not the same, are they?—No; but you may find the soft chancre indurated, if I understand you right.

7727. I see. You may find the base of the soft chancre indurated?—That is quite so.

7728. Then how are you going to diagnose it?—You take the connection, as a rule, when a patient comes to you, which is often the case—they know where they have contracted that sore from.

7729. You would rely on the history then?—You have to combine it at the time, because you could not rely even on an undurated base, or even a soft chancre: because I have had those that have had caustic applied by allopaths, and it alters the chancre altogether. You may form your idea about them, and use your judgment in connection with it, and use your treatment accordingly. You could not confine yourself and say: "Because this is an indurated chancre, it is absolutely syphilis." There are other conditions that might arise bringing on an indurated condition. It might be from hereditary syphilis.

7730. And you say that the Wassermann test for *spirochæta pallida* is a failure?—Yes. The cases I have seen have not been successful.

7731. You have seen the Wassermann test tried?—The information I express—

7732. With the view of eliciting the fact of the existence of the *spirochæta pallida*?—I have not practised it.

7733. But you say you have seen the results of it, and you say it is a failure?—The result is that the test is a failure in that direction. You give medicine, and you drive out the spirochæta of the disease.

7734. But the Wassermann test is not medicine. You say the Wassermann test is a failure?—The test of

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finding the spirochaete is correct, if that is what you mean. I admit that you may find it.

7735. By the Wassermann test?—Yes, that is so.

7736. That is all I wanted. You can find the spirochaeta pallida by the Wassermann test?—As far as bacteriology is concerned, it is correct.

7737. You say the test is a failure?—No. I misunderstood you.

7738. I have copied down your words; but I will leave the Wassermann test. You abolish mercury and arsenic from your pharmacopœia?—Decidedly. There is no need for it.

7739. If you were told that a case of syphilis had been cured in six months by arsenic, you would reject it—you would say impossible?—No, I am not going to say that.

7740. But you say it is deleterious?—The cases I have had.

7741. You have seen cases treated by salvarsan?—Yes.

7742. Have you seen cases treated by dioxo diamido arseno benzol?—(No answer).

7743. You are not quite sure of that?—No. I know what you mean. It is just the term, but I have not it at my tongue's end. It is in that recent salvarsan treatment book.

7744. It is in that book of yours?—Yes.

7745. You will be surprised to know it is the same as salvarsan?—Yes; I was going to say I do not see that it is necessary to go into such trivial questions. It is only splitting straws. It is simply a question of splitting straws.

7746. Then taking gonorrhœa, without your microscope you can diagnose gonorrhœa?—Decidedly.

7747. No other condition of discharge from the urethra could be present?—Yes, you may have urethritis, for instance.

7748. How can you diagnose it?—One is pus and the other sometimes not.

7749. How can you diagnose pus without a microscope?—You can see it with the naked eye. I have a microscope, as far as that is concerned. Besides, the condition is different—the inflammation is different.

7750. But if I were to tell you there are cases of urethritis which are absolutely identical with gonorrhœa, you would not believe me?—Yes. I have had inflammation which has been that way.

7751. Then how are you going to diagnose them without a microscope?—The treatment is different; one is an inflammable condition.

7752. I am not talking of the treatment. I am asking you how you are going to diagnose it?—One has not the pus and the other has.

7753. I tell you they are identical to the naked eye?—My experience is not quite the same. The organ is not the same in the invasion of the disease.

7754. What organ?—The penis. If you examine the organ you do not find the same inflammation. It is a different thing.

7755. I say they are identical?—You may say it.

7756. I have had some experience?—I do not dispute it.

7757. And not the same experience you have had in Nottingham?—No.

7758. (Mrs. Creighton.) Do you have many women as your patients?—Yes.

7759. Do a great many prostitutes come to you?—Yes, there has been at times.

7760. And have you been successful in your treatment of them?—I have.

7761. (Mrs. Scharlieb.) What are the signs of gonorrhœa in a woman?—A thick discharge.

7762. Where from?—The vagina.

7763. With what appearances?—Swelling of the parts.

7764. What else?—The neck of the womb sometimes is ulcerated.

7765. Is the ulceration a consequence of the gonorrhœa?—At times it is. It is not necessarily so.

7766. What other extensions of the disease may there be?—It may extend to the ovaries.

7767. In the woman I mean?—Yes, or the womb. It may bring on peritonitis.

7768. Anything else?—It causes growths sometimes.

7769. What kind of growths?—An ovarian cyst.

7770. What else can it cause in a woman?—

Inflammation of the whole of the generative organs.

7771. You kindly said so before; but what other organs may be diseased besides the womb and ovaries?—The bladder. It may bring on cystitis.

7772. How would you know the difference between a cystitis caused by mechanical irritation and a cystitis caused by the gonococcus?—There would be the evidence relative to it.

7773. In what way, please?—You diagnose from what the patient says the time of discharge has been on, we will say, and the suddenness of the coming on of inflammation.

7774. But in all these cases, if you have cystitis you must have inflammation?—Pressure over the pubes would show it. There is an inflammation.

7775. That is an indication of the inflammation of the bladder, at any rate; but it does not show you that you have gonorrhœal inflammation of the bladder or the organs?—You take the combination of the effects before you of the part.

7776. So that you would not take some of the discharge and examine it under the microscope?—No, I have not done that.

7777. How would you treat it in a woman?—I should treat it by flushing.

7778. Do not you think that by flushing you are very liable to carry the disease higher up?—The simplest thing is borax, and it is almost harmless.

7779. But the mechanical effect is to carry it up, is it not?—Yes, I can quite understand that; but I have not had any trouble in that direction, because of the harmlessness.

7780. What is the effect of gonorrhœa on the child?—That affects the eyes.

7781. (Mr. Snowden.) Would you be entitled to practise medicine in America with the degree that you have, and to give death certificates?—Decidedly so.

7782. You would be regarded as a fully qualified man?—A fully legally qualified medical man.

7783. Did you undergo a course of training at this college to which you referred?—Yes, and by examination.

7784. For what length of time?—The last college I attended in session. At the time I graduated in 1886 I did what are termed three sessions. The rules were different then to what they are now at this college. Of course I attended that session.

7785. Did you go through the same course then in medicine and surgery as those who were going into allopathy?—Decidedly. You have to possess just the same. Practically speaking I am an allopath. That is, I take Erichson for surgery—you can understand what I mean—Roberts for practice, or Playfair for midwifery.

7786. Are you an Englishman?—Yes.

7787. Did you go to America for the purpose of undergoing this course?—Yes, this particular college, because it is a different system of medicine.

7788. Had you been practising as a herbalist in this country before you went?—Yes.

7789. I understand the society you represent here this afternoon contains about a couple of hundred members?—That is so.

7790. It must be within your knowledge that there is an enormously larger number than that of men who are practising herbalism?—There are about 2,500.

7791. Is there any other society besides this one?—Not that I am aware of.

7792. Then what is your attitude to the herbalists outside your society? Do you look upon them as quacks, if I might use such a word?—Yes, those that are not qualified. Of course, we have nothing to do with them. We do not interfere with their practice. They have their own matters to attend to and are responsible for whatever they may do. We try to qualify our members to such an extent that they shall be fully equipped with that knowledge which is to be of service to the public in every direction in an honest way. That is our intent. It may be a humble way at the present time; but we are seeking

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for legislation so that we shall be able to give them as thorough training as other medical colleges.

7793. What percentage, roughly speaking, of your patients are suffering from this venereal disease?—I could not answer that.

7794. Would it be accurate to say that a very fair proportion of your practice is in diseases of this character?—No. Since the spirochæta treatment I have not had very much.

7795. Do you advertise?—Yes, just one paragraph.

7796. You have never specially advertised your skill in the treatment of these diseases?—No, I do not advertise for that. It is not permissible under the Act.

7797. (Dr. Arthur Newsholme.) What Act is that?—The Indecent Act, I believe, is the title.

(Sir Kenelm Digby.) The Indecent Advertisements Act.

7798. (Mr. Snowden.) Do you get a great many cases of venereal disease after they have been to an ordinary medical practitioner?—Four out of every five that come to me have been under an allopath.

7799. That is to say, only one-fifth of those who come to you come to you in the first instance?—That is so.

7800. Do you assume from that then that the treatment by the ordinary medical practitioner of these diseases is not very satisfactory, or one might almost say a failure?—It is difficult to put that in a narrow sense. Are you a medical man?

7801. No.—Then I will put it in this way. They may go to an allopath and they may not have means to continue his treatment, or there may be other circumstances that would prevent them continuing. They may be dissatisfied, and they may come under those conditions. It varies in civil life. It is not like having a regiment of soldiers who all come to you; so that you cannot pronounce and say absolutely that every medical man is negligent. I am not going to put that forward in that way. I quite understand the beneficial results of the allopath treatment. I admit beneficial results in many, many ways. I am not narrow-minded, but still you have to confine yourself to the truth. For instance, deviating a moment, I have two cases of jaundice and also of gall stones. These people were not satisfied with allopathic treatment. You are called in and herbal treatment seems to remove the whole thing like magic, practically speaking. Here we have specimens of stone in the bladder which were taken out by herbal treatment, (*Producing small phial containing stones.*) You see, if you can save an operation it is a grand thing for herbal remedies to be applied. It is the same thing with stone of the kidneys.

7802. I will pass on now to this point. You admitted just now that the allopathic treatment can be very serviceable for certain diseases. Do you think, as a result of your experience, that the ordinary medical practitioner is as well qualified to treat venereal disease as other diseases?—Personally, I should not use mercury or arsenic. I will answer that way. It is not for me to give a judgment on other medical men. I have no desire to do so. I do not use mercury or arsenic, and if other people prefer, as they do in the States, where the citizens have full liberty to go to either an allopath, a homeopath, or a herbalist—to go to one who employs mercury or arsenic; that is his business and not mine.

7803. Supposing a person came to you suffering from syphilis, and you diagnosed the case as syphilis, and he came to you in the first instance, how long would you consider the treatment should be continued to effect a cure?—I have had cases that have seemed—mind you, seemed—to be eradicated in three months, and I have had cases that have been six months under treatment. It depends upon the constitution. You find a constitution at a certain stage very much below par, as far as the protoplasm, the cell life, is concerned; but then you find an invasion of this spirochæta pallida coming into it. Of course, it makes a lot of difference in removing that—the conditions of regeneration or of combating it, so that we will say three or four months.

7804. What would you regard as evidence of cure?—The evidence of cure to me is that when I have given anti-syphilitic treatment there are no further manifestations of the disease.

7805. What do you mean by no manifestations of the disease?—There is no rash or anything that appears.

7806. I told you just now I am not a medical man, and therefore the form in which I put my questions may appear to you to be rather foolish; but suppose a person came to you, and the only evidence of syphilis was a sore, and there was no further manifestations—no rash, to use your phrase now—would you consider that the disease was radically cured when the sore had healed and the evidence of it disappeared?—No.

7807. Then if there were no other manifestations, how would you know that it 'was not cured'?—Taking the first instance, we will say there is an indurated chancre, and knowing full well the length of time, say three or four weeks, for that sore to be manifested, I should know there is an invasion in the system of those microbes, and you could not say that a man was cured because the sore disappeared.

7808. Therefore, it is really all guesswork as to the length of time you would continue the cure after the outward manifestations had disappeared?—No. Now you have put another question. It is not guesswork at all. If there are no manifestations after a course of treatment, we will say, of three or four months, I then conclude that there are no disease germs in the body.

7809. You referred to a case of a man who came to you after having been under ordinary medical treatment and suffering from a tertiary form of syphilis?—Yes.

7810. What was the manifestation there?—I cannot say, just at this moment, because I have not the particular clinic as far as the particular manifestation; but it was the tertiary form, sores, and those things, sometimes an indurated base.

7811. Where are the sores?—They vary. I have known the sores come in various parts of the body.

7812. We are speaking now of the sores in what you describe as the tertiary form?—The ulcers vary. You may get it in the inguinal glands; you may get it in the bones.

7813. How would you diagnose it as being the tertiary stage rather than the primary or secondary?—Because there are certain conditions that are not consonant, we will say, with the third. There is the first, second, and third.

7814. (Sir John Collie.) Would you mind telling us what they are? That is what we are all anxious to know?—What the symptoms are, you mean?

(Sir John Collie.) Yes, of the different stages.

(Mr. Snowden.) I am very interested in this. I have not yet been able to distinguish between primary, secondary and tertiary manifestations. (*The witness here commenced reading from a manuscript.*)

7815. (Sir John Collie.) We wish the information from your own experience?—Yes; but do not you see the line of demarcation or length of time? You are speaking of the tertiary form. It was just to refresh my memory. I do not want to make a mistake.

7816. (Sir Kenelm Digby.) What are you reading from?—I am reading just from the primary and rash in these cases.

7817. (The Rev. J. S. Scott Lidgett.) From your own notes or from a text book?—Not from a text-book, but from my own notes.

7818. (Sir Kenelm Digby.) The question put to you was rather a test of your own knowledge. Cannot you answer it without reference to any paper?—Yes.

7819. (Mr. Snowden.) I will put the question again, The form in which I put it before was something like this. A person comes to you with a sore in some part of the body. How do you decide whether it is primary, secondary, or tertiary?—Because of its induration.

7820. I am afraid I do not know what that means. Will you make it a little clearer to a lay mind?—The cell life of that part is impaired and it becomes indurated.

7821. But did not I understand you to say repeatedly in reply to other questions that had been

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put to you, that you diagnosed a primary sore by its induration?—Decidedly; but then the change that takes place in the structure shows the evidence of its being of a syphilitic character.

7822. What length of time would you consider necessary to effect a radical cure in a case of gonorrhœa that came to you, say, very soon after the first manifestations?—They vary. I have known it cured in three weeks, and I have known it take three months.

7823. In this case, too, how do you decide that a cure has been effected?—The discharge disappearing, and the organ looking in a healthy condition. You can generally tell from the chronic inflammation and examination of the organ. You see the evidence in the mucous membranes. That, to my mind, is the test.

7824. How long have you been in practice in this country?—25 years.

7825. What would you say, based upon your experience, in answer to this question as to whether syphilis and gonorrhœa are more common to-day than they were 25 years ago?—Are they more common, do you ask?

7826. Yes?—No, I do not think they are. I think education is such that men do not commit themselves as much as they did in the past. They have a knowledge of these things, and by that knowledge of course they are more careful.

7827. I will put you only one more question. Do you have any cases or many cases of gonorrhœa and syphilis that resist your treatment?—Seldom. I have an occasional one. I do not profess to be perfect, and the reason I give this in this expression is that they disappear from you, and they do not know decidedly in their own mind whether or not they are positively cured. They are perhaps not having means at their command. It is not a question, do I know whether they are cured; but I am trying to answer you in this way, that you do not know where they go to.

7828. That prompts me to put one further question. Do you find a tendency on the part of people to stop coming to you for treatment as soon as what you might call the acute stage of the disease has passed, or as soon as they have the idea in their own mind, "I am cured now, and I think I shall go"?—Often it is so.

7829. (*Dr. Mott.*) You say that four out of five cases you see come from allopaths and have been previously treated by allopaths?—That is so.

7830. Then you do not see them in the primary stage at all?—A great many of them, of course, I do not.

7831. You see them in the tertiary stage?—They have been under someone say a week or so, and even in the primary condition caustics have been applied, and they have been so painful to them with the treatment in that direction that it has driven them elsewhere.

7832. For syphilis?—Yes.

7833. Do you ask them how they have been treated, whether they have taken medicine or pills or had local applications?—They say they have been under a medical man.

7834. But you do not make any inquiry as to how they have been treated?—Sometimes, if it is a complicated case. Of course a patient could not tell you what the treatment was.

7835. Yes, they could?—They might say, "I have had a lotion or a caustic applied."

7836. They could tell you whether it was local treatment or general treatment they had had?—Decidedly, in that form of expression.

7837. Have you ever seen gummata arise in syphilis?—Yes.

7838. What stage have you seen gummata in?—It arises from the second or third stage.

7839. Do you know any parts of the body where it is liable to occur?—In various parts.

7840. Do you know any of the latent diseases of the nervous system due to syphilis coming on ten years afterwards?—I believe I have answered that question to the other gentleman.

7841. I do not think you answered it very satisfactorily?—In what particular case was it not satisfactory?

7842. I want to know what diseases come on as a result of syphilis about ten years after the infection—well-known diseases?—Personally in my own clinic I have not had any.

7843. But surely as a medical man—?—Yes, I have had them from allopaths; and you find them with the liver wrong, and the kidneys are wrong or the lungs are wrong.

7844. Have you heard of any serious nervous case?—Yes, there is paralysis follows.

7845. What form of paralysis?—Various forms.

7846. Did you ever hear of locomotor ataxy?—Yes; that is just the word that I was trying to get at my tongue's end. That is one.

7847. Can you tell me what sign is diagnostic of locomotor ataxy?—Impaired function of the nerves as far as the legs are concerned.

7848. Many diseases have that; but this disease has a particular sign?—Yes, it is in the walk and gait—the inability, you mean.

7849. That is not always the case; but what pupil phenomenon is there? Do you know what the Argyll-Robertson pupil is?—I could not say that I do.

7850. It is a well known sign; it is about as well known a sign as any, I think?—I may know it, but I do not know the name.

7851. Do you know whether the pupil re-acts to light in locomotor ataxy?—I am not versed in that.

7852. You are not aware of that?—No.

7853. You mentioned Wood's Therapeutics. You do not claim that book as a herbalist's book?—No, it is an allopath's book.

7854. It is a very fine book?—It is, I agree.

7855. You compared it with our pharmacopœia?—I compared it with King's American Dispensatory.

7856. What comparison is there between the two?—The American Dispensatory is superior.

7857. That is a matter of opinion?—I say that, of course.

7858. Then you spoke of Parke Davis. A layman who does not know anything about this might think your evidence was correct about Parke Davis; but Parke Davis are not herbalists. They supply everything; they supply all the anti-toxins and everything necessary for treatment?—I quite understand that.

7859. Why did you mention Parke Davis as supporting herbalistic treatment?—Because they have the fluid extracts. I referred to it from a pharmaceutical standpoint. I say they have pharmaceutical preparations. He brought up a point relating to pharmacy at that point.

7860. But I do not think that Parke Davis would claim that they were herbalists in any way, or had anything to do with herbalists?—Parke Davis supply many of the eclectic practitioners in the States. They send to that firm because of the high standard of drugs they prepare. But as far as standing for one system of medicine is concerned, most decidedly not. And if I have created that impression, I had no intention of doing so.

7861. Then as regards this society to which you belong, and which has 200 members, you say all these members have passed an examination?—No, I did not say that. I said the members who have joined of recent years; I did not say all, because there might be some who are old practitioners who are admitted say on 20 years' practice.

7862. Who are the examiners may I ask?—The council.

7863. Who constitute the council to examine these gentlemen?—I examine in pathology.

7864. You examine in pathology?—Yes. I have a copy of the examination paper if you wish for it.

7865. Where are they trained in physiology, anatomy and chemistry?—They have lectures at the College at Southport.

7866. Are they qualified teachers?—Decidedly so.

7867. Does one man teach all the subjects?—No; each takes respective subjects.

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7868. You have explained to us how they learn their anatomy. If they learn their physiology and chemistry in the same manner, I do not think they will know very much. But you lay emphasis on the apprenticeship?—Yes, decidedly.

7869. How long does the course take preparatory to apprenticeship?—Seven years' apprenticeship.

7870. I said preparatory to apprenticeship?—There is no preparatory. You mean preliminary, or anything of that kind.

7871. No. I suppose they are learning anatomy, physiology and so on, or are they apprenticing first?—It is through the apprenticeship that they acquire that knowledge, on the termination of which they are examined.

7872. Then you give them a diploma?—Yes, membership.

7873. (*Rev. Scott Lidgett.*) I understand you enjoy a somewhat large practice in Nottingham?—I do.

7874. Therefore you have a considerable local reputation?—I have.

7875. Is that reputation partly as a man skilled in dealing with venereal diseases?—No, general practice.

7876. Then in what way, may I ask, does your connection with venereal patients arise?—The same as any other practitioner.

7877. But you told us a good many come to you suffering with these diseases, who have been to the ordinary practitioner?—That is so.

7878. I assume that you get a great many who have not sought other advice?—A great many. It varies, you see; one recommends the other in that direction.

7879. When they come to you from other practitioners, in your judgment, do they still keep up attendance with the ordinary doctors?—No.

7880. Why do they leave the ordinary doctors and come to you generally?—Because perhaps they have been recommended invariably by others.

7881. That is to say, you enjoy a local reputation?—Yes, it is so in that case.

7882. In your opinion, do they come to you because they have not persisted in the ordinary treatment long enough, or because they find the ordinary treatment ineffective?—They say sometimes it is ineffective, and sometimes they are dissatisfied.

7883. Then you do not think they carry it on simultaneously?—It is hard to decide in what way. You hardly know sometimes, but prejudice we will say.

7884. Do they find themselves, if I may so put it, more at home in coming to you than in going to ordinary medical practitioners?—I do not know about that, I have to treat them practically; there is no at home about it.

7885. Are most of your patients in these diseases quite young?—No, all ages. I had one over 70 years of age the other day, I am sorry to say.

7886. But in your experience could you give us any information as to the way in which ages predominate. Do you get a large preponderance of young people?—Of course it is in the adolescent age, 20 to 30 say, that many of them make the mistake.

7887. Have you had any patients under your hand who have gone in for the salvarsan treatment?—Yes.

7888. Do you know for how long they have persisted in that treatment?—It varies. Sometimes they say they are cured, and at other times they say they are not.

7889. But for how long have they persisted in it? In some cases I have had they have been as long as three years with the mercurial treatment included. It has been a combination in some cases.

7890. But when they have come to you after two or three years, what signs in your memory have they given of the disease being still active?—They often say they do not feel quite right, and perhaps the evidence is the impairment of the vital forces of the constitution, which seems to linger.

7891. They do not feel quite right; that is your main answer?—Their constitution seems to be going down and down after this treatment.

7892. Their own sense of being unwell, and your observation of their state of health, does not depend on your finding any possible signs of syphilis?—Only the symptoms that then present themselves, of whatever kind they may be.

7893. What kind of symptoms after three years?—It depends on the stage.

7894. May I limit your answer? We are now dealing with patients who have been under salvarsan and have come to you after two or three years, although I do not think the treatment has been in operation for that length of time?—It is about three years since.

7895. They are not feeling very well. What signs of syphilis have you found in those cases?—It varies. Sometimes it has been in the throat, sometimes ulceration; sometimes it has been in the joints. It just depends—necrosis of the bones. It depends on the stage and apparently on the stage either mercury or arsenic is used—whatever it has shot up in, it breaks out accordingly.

7896. Where is the salvarsan treatment given in Nottingham?—I cannot say. I know there are practitioners who use it, so I am informed.

7897. General practitioners?—I am informed so. I would not say that I could guarantee it.

7898. And in any of the institutions in Nottingham?—I could not answer that question; I do not think so.

7899. I suppose you understand the technique of the salvarsan treatment?—Decidedly. It says 34 per cent. of arsenic. As far as the injections of this treatment are concerned, and its effects on the constitution, beyond the disappearance of the spirochæta pallida—I quite understand its disappearance in theory.

7900. Then we are to take it there are some general practitioners who have been for the last two or three years administering this in their practice?—So I am informed. I can speak of definitely, say, three cases. That is all I should like to say definitely that I am informed of with salvarsan; but not the mercurial treatment, because I have that constantly in hand.

7901. They have come to you disappointed. In a case of that kind will you tell me what sort of treatment you would provide? I am taking now the case of a man who has had salvarsan for two or three years and feels unfit. I have not gathered what signs of unfitness he shows, except his own feelings. Will you tell me how you would deal with that case at that stage?—I should give the anti-syphilitic treatment, and if there were any manifestations of the disease, they would soon present themselves.

7902. You would give him this *Stilinga Phytolacca*?—Any of the vegetable remedies that are employed in those cases.

7903. Is what I have elicited, the characteristic of all the other members of your Association?—It varies, of course, on the practitioner's idea somewhat.

7904. Have they a special reputation for dealing with venereal diseases?—Who?

7905. The members of your Association?—No.

7906. They have not a speciality of it?—No, nothing more than the allopaths.

7907. I suppose you know that a considerable number of herbalists have?—Yes, I am; and regretably so.

7908. But your Association?—They do not allow their members to advertise anything relating to venereal disease.

7909. I am not talking about advertisement; but do the ordinary members of your Association make a speciality of dealing with venereal diseases?—No, not in that direction particularly, any more than any other disease.

7910. But the ordinary herbalist, who is not a member of your Association, does I think?—I am not responsible to answer that. If you say it is, you may.

7911. It is not in your knowledge that he does?—No.

7912. (*Sir John Collie.*) I am afraid, judging from some of your answers, that I am not quite so conversant with some of these details as I should like to be, and perhaps you would be able to help me. For

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[Continued.]

instance, I do not think you made it quite clear to the Commission what is the difference between what you called the Wassermann and salvarsan treatment?—I do not quite follow. The salvarsan treatment is treatment by arsenic.

7913. You spoke of the Wassermann treatment and the salvarsan treatment, I should like to know, as a member of the Commission, what is the difference; so that I may have something to go upon in any other questions I want to ask you?—I could not answer all the particulars in relation to that. I can only express this in condensed form. The treatment, as I understand it, is by arsenic and mercury.

7914. Which?—The salvarsan treatment; you might put it 606.

7915. Now I understand what the salvarsan treatment is. What is the Wassermann treatment?—I do not recollect using that word.

7916. Do you know what the Wassermann reaction is?—You mean the injection of the serum. Are you referring to that?

7917. I want to know generally what the Wassermann reaction means. You spoke of it in reply to some questions. May I take it it is outside your line of treatment?—Yes, it is.

7918. I notice you said that the period of education in your college in the United States was a four years' course now?—That is the rule at present.

7919. What I want to know is, what length of time it took you to qualify; because you have been qualified 25 years I gather?—It was then of two years' duration.

7920. I understand you are a lecturer on pathology?—Yes.

7921. Would you tell us what subjects you were taught 25 years ago in the two years' course?—There was anatomy, physiology, pathology, materia medica, therapeutics, medicine, surgery, midwifery. That is the usual curriculum of all medical colleges.

7922. Will you tell me what the pathological course consisted of; you said you are now a lecturer or an examiner on the subject. Twenty-five years ago pathology was somewhat in its infancy, was it not?—Yes, it was considerably so.

7923. Will you tell us first of all what the course of lectures was?—The lectures were given by professors, and the medical books were resorted to in connection with it.

7924. Let us stick to the lectures. Were the lectures on pathology itself?—Yes, there were lectures every day in the course.

7925. What number of lectures on pathology were obligatory?—I could not say.

7926. Ten or twenty?—Yes, of course.

7927. How many?—I could not say. Just imagine, it was every day. You can understand 9 to 10, pathology. Say Professor Jones takes pathology 9 to 10.

7928. What subjects did they teach you in pathology? I am anxious to know what the curriculum was?—It is the same as you get in the text-books.

7929. Will you tell us what is in the text-books that is the same as in the course?—Of course it is the alteration in morbid pathology in relation to disease.

7930. That is only a definition of pathology. Would you please attend to the question I am putting. What I want you to do, is to name the different subjects?—Take syphilis in its alterations, say; that is the particular form you are now sitting to investigate.

7931. Do you mean they taught you the pathology of syphilis?—Yes, as then understood.

7932. That is one subject. What else did they teach you; because we are talking now generally of pathology?—That is one.

7933. I accept that; is there any other subject?—Yes; take even rheumatism and its changes.

7934. That would be very interesting; what did they teach you about rheumatism?—The alteration of the joints, the structure of the different parts, and that kind of thing.

7935. How would they teach the pathology of rheumatism?—You get your clinics.

7936. "Clinical" means bedside. You would not have pathology at the bedside?—Yes, you get that at

a hospital; you get an enlarged joint. Take acute rheumatism. What does the pathologist see—a swollen joint, we will say. That is evidence; it is the diagnosis of it.

7937. I do not think you yet quite appreciate what I want. I want you to give us a general idea of what the different subjects in the course of pathology were?—I could not answer just now; because there were not all the courses taken that are enumerated in the medical text-books. This is only a general outline of the comprehension of pathology in relation to disease.

7938. I will take it at that. You know that the despised allopaths have insisted on a preliminary education. Sometimes we have to go to the University before we can begin the study of medicine?—Yes, I understand that.

7939. I hope you will not mind my asking this question; but can you tell us what the preliminary education for the herbalist is?—The preliminary education relating to an allopath, or any other practitioner in the States, at that time was of an ordinary character. At the present time there is a standard set forth.

7940. Shall we stick to the time when you passed?—No, because that is not the present time. They were not then in force.

7941. If I may, I would like to stick to that?—I cannot answer just now.

7942. Was there any preliminary test 25 years ago?—There was.

7943. If so, then you passed it?—Decidedly.

7944. Would you mind telling us what it was?—It was an ordinary examination as far as comprehension—well; reading, writing, grammar, mathematics, and those things.

7945. Take mathematics. What subjects in mathematics did they examine you in?—I could not say. There was no regular rule, only that a man should be sufficient of a scholar. It was ordinary education at that time.

7946. They just asked you if you had sufficient education, did they?—They gathered it from—

7947. Conversation?—Generally, of course.

7948. So that actually there was no preliminary examination in those days?—You had to prove, or rather evince certain knowledge to them which could not be expressed otherwise than by acquiring it.

7949. Will you carry back your mind to the time you passed? How did you evince your general knowledge?—The question was put. "Have you attended school?"

7950. You said that you had read the latest books?—On syphilis.

7951. As a matter of fact I took it down at the time. You said that you did not practice the Wassermann?—I do not practice the allopath treatment; that is the thing in a nutshell.

7952. Will you let me finish the question before you answer. You said you had read the latest books on the Wasserman reaction?—Yes.

7953. Would you mind mentioning the names of one or two of them?—I could not answer that question straight off.

7954. You said you were perfectly conversant with the Wasserman reaction, and you answered several questions that were put to you with regard to it?—The salvarsan.

7955. What I want to know is what your idea is as to how it is administered. Is it given in a tablespoonfull, dose, or in pills, or what?—It is injections.

7956. Do you know where it is injected?—Between the shoulder blades, and in the glenoid regions.

7957. Into the muscles?—Sometimes it is subcutaneous, sometime intravenous, and sometimes in the muscles.

7958. In the veins or in the arteries?—Yes, and that is where lies the danger.

7959. Did you say sometimes the arteries?—No, the veins only.

7960. I am very interested in your herbalist treatment. You seem to have drugs that have a wonderful

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[Continued.]

effect on many conditions of the body. I was wondering if you have any drugs that have any effect upon prurulent discharges?—Do you mean from the generative organs?

7961. From any organ?—Catarrhal conditions, do you mean?

7962. Yes?—Yes, marshmallow root.

7963. Supposing you had a case of appendicitis, what would you do?—Use inflammation medicine, and apply herbal decoctions.

7964. Supposing you knew that the appendix had actually suppurated, and that pus had formed, what drug would you use?—I should use a drug and a herbal decoction for fermentation.

7965. Supposing the herbal decoction had no effect in drying up the secretion?—I have not had a case yet where it has not. If it was of a mechanical character it would necessitate a surgical operation, or if a case comes to you in a primary stage you say, "You have taken a certain stage."

7966. Suppose you find it is necessary to have surgical treatment?—Then you would go to the hospital. All major operations go to the hospital.

7967. You would send a major operation to the hospital?—No, I have not had a case of operation yet, singular to say.

7968. How many cases of appendicitis do you suppose you have had?—Six or eight.

7969. And none of them required operation?—Three were under allopaths who wanted to operate, and, as you are on the Commission, you know the case I reported at Mansfield where they wanted 20*l.* from a widow for an operation, and they said she could not live without it.

7970. I do not think we will go into that?—But you are bringing up the subject of appendicitis, which is not venereal. Why do you go to outside subjects? I might as well be pertinent.

7971. You said you thought in your opinion rheumatoid arthritis was one of the sequelæ of venereal disease?—I believe it to be in some cases.

7972. Rheumatoid arthritis?—You might say it is that; it is termed that.

7973. How would you treat a case of stricture of the urethra?—I do not use injections. I have never used injections.

7974. I did not ask you that?—No; but I have not had any.

7975. Let me put the question again. I am not asking you how you would not treat stricture of the urethra, but how you would treat it?—Sometimes by a bougie to enlarge and sometimes by medicines.

7976. So that you do practise surgery to that extent?—Yes, in anything of that kind.

7977. I am not quite clear how you diagnose the difference between a discharge from the urethra in a woman as the result of inflammation of the bladder, and a gonorrhœal discharge. How would you diagnose it?—At a certain time there is a purulent discharge—thick; and in connection with the circumstances bringing it about, thereby judging it to be connected with that; and you would find that that discharge keeps on for a certain period.

7978. Supposing you could not find out; would you examine the womb?—Most decidedly if it is necessary; it is very difficult at times.

7979. Then with regard to the question of the treatment of stone in the bladder by medicines, are you getting rid of all stones in the bladder by medicines?—Yes, I have been able to do so in most cases I have had. There have been isolated cases where they have had to have surgical treatment.

7980. But if you were given a chance, I suppose you could treat successfully all cases of stone in the bladder?—No, I should not like to say all cases; I should say many cases. That is a great assertion to make.

7981. Do you mind telling me what kind of fees you charge?—1*s.* or 1*s.* 6*d.* a bottle, or a week's treatment 3*s.* or 3*s.* 6*d.* That is in ordinary practice.

7982. In your ordinary practice as a herbalist, how would you diagnose the difference between tabes and general paralysis of the insane; you must come across cases?—A marasmus condition of the constitution. You cannot always tell. I should not like always to pronounce.

7983. Do you ever come across a disease called disseminated sclerosis?—Yes.

7984. Can you give us any of the symptoms?—Of what part?

7985. Of what part?—Yes; you mean a hardened condition, we will say, of the eye—of the tumor.

7986. I said disseminated sclerosis?—I could not answer that question in the way it is put.

7987. Will you tell me if you are aware that the law does not prevent any unregistered person from practising medicine or surgery by making it an offence for him to do so. However, he may not recover fees and charges for so doing. He may be sued in a civil court for penalties by any of the medical or surgical corporate bodies whose rules he may infringe, and he is liable to prosecution for the use of any name, title, or addition, implying that he is registered and legally recognised as a medical practitioner?—I am fully cognisant of it. I have all the Medical Acts in my possession.

7988. (*Sir Kenelm Digby.*) Following up that question of Sir John Collie's, is your society free from the Apothecaries Act of 1814?—Yes; it is under the statute of Henry VIII.

7989. Under the statute of Henry VIII.?—Yes, the Herbalists Act.

7990. That is why you are not subject to the penalties under the Apothecaries Act?—Yes, it is. We do not represent ourselves as registered medical practitioners or allopaths.

7991. I am not talking about that; but I want to know how you escape from the Apothecaries Act, and you say under the Herbalists Act of Henry VIII.?—Yes. It is more customary. There was a legal decision given by the Lords recently that the practice of medicine is free in England. That is the legal opinion of the House of Lords.

(*Chairman.*) Thank you.

The witness withdrew.

TWENTY-FIRST DAY.

Friday, 27th February 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.B.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. BRIAN O'BRIEN called and examined.

7992. (*Chairman*.) You are medical inspector to the Local Government Board for Ireland?—Yes.

7993. How long have you held that post?—I have held that post since the 1st December 1910; three years and a couple of months.

7994. Would you tell the Committee in general terms what your duties are?—My ordinary duties are the supervision of the public health departments of the different local sanitary authorities.

7995. Which are all under the Local Government Board?—They are all under the Local Government Board, which is the supervising authority. I am also an inspector under the Poor Law; that is to say, I inspect the different dispensaries in the north of Ireland. My duties do not extend to the workhouses.

7996. You have not the sanitary control of or supervision over the workhouses?—I personally have not. Of course, the Local Government have, but that work is done almost entirely by another inspector.

7997. There are separate inspectors for that part of the duties of the Local Government Board?—Yes, there are five of what I might call district inspectors in Ireland, of whom I am one. There were two, and at the present time there are three medical inspectors of the workhouses in Ireland. In addition to that, of course, the workhouses are supervised by the general inspectors, of whom I think there are eight.

7998. To what particular institutions do you devote your time?—I do not devote much time to any of the institutions. I devote my time to the public health; that is to say, I inspect each of the sanitary authorities once a year. I am supposed to inspect the records of each particular sanitary authority once a year and to report on the work of each and on the condition of public health in each place to the Local Government Board once a year. In addition to that, I am supposed to visit every dispensary doctor in my district—which comprises about five counties—once a year and to report on their work.

7999. (*Sir Kenelm Digby*.) Will you tell us what counties?—I cannot tell you definitely, because my district is divided into different unions; but I am over the whole of County Down, the whole of County Antrim, the whole of County Armagh, about half of Tyrone, about a quarter of Derry, most of Louth, part of Cavan, and a small part of Meath.

8000. North-East Ulster?—Yes, North-East Ulster.

8001. (*Chairman*.) Is the working of the Local Government Board pretty much the same in Ireland as it is in England?—I do not know that I am in a position to answer that, because I do not know quite what the Local Government Board does in England. I think we have a very much more elaborate dispensary system in Ireland than you have in England, and a very much larger proportion of our population is treated under the poor law; I mean a very large proportion of the population is treated by the dispensary doctors. In the city of Belfast there would be, roughly speaking, between 45,000 and 50,000 tickets issued for medical treatment during a year by the dispensary doctors.

8002. The dispensary system is more highly developed in Ireland than it is in England?—Very much more.

8003. Your system, generally speaking, is more paternal in Ireland than ours?—I think that is so; I think we are more paternal.

8004. Under the working of the Poor Law in Ireland are venereal diseases looked upon in just the same way as all other diseases are?—Yes, as far as I know there is no distinction made.

8005. So that any poor person is entitled and might expect to be treated for these diseases?—He might and would.

8006. He would have a claim to it?—He would have a claim to it, certainly. I may say that while that is so, from the nature of the disease I do not think that venereal patients go to the dispensary doctors in the same proportion as they do when they are suffering from other diseases. They generally like to go to some man who does not actually reside in their own district—in the country districts at least.

8007. So that any statistics you could produce from the dispensaries would not be any guide to the prevalence of the disease in Ireland?—I think they would be absolutely untrustworthy.

8008. You tell us in your *précis* that you have visited all the larger towns in Ireland and many of the smaller ones, as well as a certain number of rural districts, and that the impression made upon you was that there was a decline of venereal disease in the country districts and small towns?—I was told by medical practitioners, not only the dispensary doctors but the general practitioners and the surgeons of the county infirmaries (some of whom had been in practice for the last 30 or 40 years), that there was a very marked decline in venereal disease as far as the country districts are concerned.

8009. Was that opinion based upon an impression or did these doctors with whom you had personal interviews keep any records?—No, I do not think any of them could have given me records in regard to that subject.

8010. They do not keep them?—No, they do not.

8011. This is an impression derived from their experience—that there is a general diminution going on?—Yes, as regards the country districts.

8012. I suppose you cannot suggest any way in which we could get any fairly accurate figures showing the incidence of the disease?—No, I cannot. In Sir William Wilde's report of the survey of the Census of 1851 he gives the number of people who died in poorhouses and in other institutions during that year and for the 10 years 1841 to 1851.

8013. Those figures appear in the Registrar-General's report, I suppose?—Those are the ones which would appear in the Registrar-General's report. I do not know whether in that report that fact was brought out, but it was brought out in connection with the Lock Hospital.

8014. Then you say that the military returns showing the incidence for the past 10 years of venereal

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[Continued.]

diseases among the troops quartered at the several stations confirm your general opinion of the lessening prevalence?—There is no doubt about it that the military figures have been coming down very much all over Ireland.

8015. They are coming down, of course, everywhere, all over the world. But as far as the small country military stations are concerned, you say those figures may indicate less incidence among the general population?—The military figures show a very small incidence, excluding the towns of Dublin and Belfast and the troops who are stationed within 30 miles of Dublin and Belfast.

8016. Your opinion is that venereal disease, syphilis especially, is almost non-existent in the rural portions of Ireland, and uncommon in the smaller towns. Does gonorrhœa occur more often in rural districts and small towns than syphilis?—I think so.

8017. Do you think there is any reason for believing that gonorrhœa is on the down grade?—I could not say that. The diminution seemed to me to be in regard to syphilis because the doctors told me more about that disease. I do not know that there is any diminution in regard to gonorrhœa.

8018. The doctors with whom you had interviews did not tell you that there was a corresponding diminution of gonorrhœa?—No, I cannot say that I have that idea at all; the information I was given was in reference to syphilis.

8019. The figures we have had before us already show that in Dublin the case is very bad with regard to syphilis, quite exceptionally bad. Can you account for that in any way?—No. I understand that the Registrar-General's reports are very bad. With reference to the Registrar-General's figures the criticism has been made that a larger number of people die in public institutions in Dublin than elsewhere—in Ireland anyway—and that is so. Deaths occurring in public institutions are more accurately registered than those occurring in private practice. This would make the Dublin figures unduly bad as compared with other places. I got last year's return from the Registrar-General, and the number of people who died in public institutions in Dublin is certainly much larger than it is in other towns in Ireland, including Belfast.

8020. That is as far as one can see?—As far as I can see, certainly. 38.6 per cent. of the deaths in the Dublin Registration during 1913 occurred in public institutions, the percentage for 27 town districts, including Dublin, being 30.4.

8021. Judging from the Registrar-General's figures, it would appear that Dublin is in a worse position than any town in the United Kingdom, including London. You cannot account for this special prevalence in Dublin in any way, can you?—There are a lot of causes contributing to the prevalence in Dublin. I have no doubt that the poverty of Dublin contributes, and I have very little doubt that the conditions under which the people live are also responsible.

8022. There is very bad housing in Dublin?—The housing in Dublin is very bad. Those tenement houses do not tend towards morality. There is also the fact that Dublin is the refuge of people from the greater part of Ireland who are doing no good for themselves and come up to Dublin. And also, there is no doubt about it, that girls who go wrong and have become pregnant very largely go to Dublin. We have large maternity hospitals in Dublin where a great many people from the country are treated. When these girls leave the maternity hospitals I think it is quite possible a certain proportion of them, at any rate, do not lead very correct lives. I do think the housing conditions, the poverty of the people, and, possibly, the uncleanness of these places do tend towards a greater prevalence. You must also take into account the fact that Dublin has always been a large garrison town; I mean there has always been, as far as I know, a much larger proportion of troops stationed in Dublin than in almost any corresponding town. The average number of troops stationed there during the last 10 years is between 4,000 and 5,000, and in addition to that you have between 4,000 and 5,000 troops quartered within 20 to 25 miles of Dublin.

8023. And also, of course, it is a seaport town?—Yes, it is a seaport town.

8024. There is not much trade in the Port of Dublin from foreign countries, is there?—No, not a great deal.

8025. It is mostly cross-channel traffic?—Yes, mostly cross-channel traffic.

8026. We may take it, then, that the prevalence in Dublin is probably as great as, if not greater than, it ever was?—I am rather inclined to think that it is greater than it was some time ago. But if you go back to the figures of the Lock Hospital of, say, 100 years ago the admissions at that time were enormous.

8027. I am coming to the Lock Hospital later on?—Yes, but I should like to mention this now, if I may. They had both men and women patients, of course, and there were also some out-patients, but the figures were very big. In fact, at one time it contained 300 beds, and they could not take in a sixth of the people wanting admission.

8028. Turning to Belfast, there is no reason to suppose that there is any considerable diminution going on there either?—No, probably not in Belfast.

8029. Practically speaking, as regards the investigation of the prevalence of venereal disease we need not trouble ourselves, I take it, with the country districts and small towns of Ireland at all, but can focus on Dublin and Belfast?—Especially in small towns in Ireland, syphilis is uncommon. There is a certain amount in Cork, which is a city of about 76,000 inhabitants. But I understand from the medical men there that there is less than there was. There is a small prevalence amongst the troops, and I do not think there is any very great prevalence among the general population in Cork.

8030. As regards Dublin, can you suggest any means which we might adopt in order to get any statistics of the incidence of these diseases?—No, I do not know of any way in which you can get accurate figures.

8031. I suppose we could get the figures of all the institutions in Dublin which treat these diseases?—I think most of the institutions are getting together figures for you; I know some of them are in regard to the present six months.

8032. Then, coming to private practitioners, are there any such in Dublin who have a large practice in these diseases and so are likely to keep records?—Some doctors deal largely with these diseases, but whether they keep records or not I cannot say; they might if you requested them to do so.

8033. You do not think they do generally?—I do not think they all do.

8034. What provisions are there in Dublin for dealing with venereal disease. Of course, you have told us about the Lock Hospital?—There is the Lock Hospital first. It is a very old institution; it has been in existence and in its present situation since 1792. It had at one time 300 beds, but it has now 100 beds, of which I should say certainly not more than 60 per cent. but probably about 50 per cent. are occupied.

8035. Only 50 per cent. of the beds are occupied?—Yes, and there has not been for some years more than 60 per cent. occupied.

8036. Do they take in women as well as men?—They only take in women.

8037. According to that percentage they are not working up to their full power?—They are not working up to the full number of beds.

8038. Is it a good and attractive hospital?—It is not an attractive hospital; the buildings are not attractive. The buildings were converted to the present purpose in the year 1792, and I think there has been a wing added since. It is situate in a somewhat slum portion of Dublin, there is no ground round the institution whatsoever, and although the staff and everybody do their best, still I think they are rather unfavourably situated to do much more.

8039. Is the hospital well equipped; can they make the microscopic and Wassermann tests there, and administer the salvarsan treatment?—One of the surgeons does all his own Wassermanns, and I think

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the other gets his done mostly by the different pathologists in the town. They do get Wassermann tests done to a large extent, practically speaking in regard to all the patients and they treat all patients, since its introduction, with salvarsan. I think as far as the treatment is concerned you could not have anything more done.

8040. It is fully up-to-date as regards treatment and diagnosis?—Yes, it is fully up-to-date as regards treatment and diagnosis.

8041. (*Sir Kenelm Digby.*) You are speaking of the Lock Hospital now?—Yes.

8042. (*Chairman.*) That hospital is provided entirely by public funds?—That hospital is provided entirely by public funds, and has been so ever since the hospital was started; it was in its present position in the year 1792. At one time the funds came to a very considerable sum per annum, but during the last—I do not quite know how many—years there has been a sum of 2,600*l.* per annum given for its maintenance. For some years there was an additional sum given when the beds numbered more than 60; it was given by the military authorities I think.

8043. How do you account for the fact that the hospital is not filled; is it that there is a reluctance to go there? It cannot be that there are not the numbers of cases in Dublin wanting this treatment?—I think there is a very great objection to going to an institution of the sort.

8044. The name, you think, is the deterrent?—The name and the character. There is a very great objection to going in, and they have no out-patients either to attract people.

8045. Is there no out-patient department at all?—There is no out-patient department at all connected with the Lock Hospital, and there has not been for the last 80 or 90 years.

8046. If there were an out-patients' department open at times which would be convenient to the working classes, would not that hospital become much more useful than it is?—Yes, I am quite sure it would. It would get in touch with more patients.

8047. How long is it since they had an out-patients' department?—They used to have an out-patients' department in the old days, but it was closed as the result of the recommendation of a committee appointed in the year 1818 or 1819. That committee recommended, for several reasons, that the out-patients' department should be closed.

8048. Was the reason that it was not attended?—No, not at all. Dr. Philip Crompton and Dr. George Rennie in the year 1819 recommended that the out-patients' department should be closed for the following reasons: "That mercury given to out-patients may do harm; that out-patients will not attend the out-patients' department for a sufficient length of time; that the patients will spread the disease while under treatment." Those are the reasons the out-patients' department was closed.

8049. That view would be a good deal modified by our modern experience?—I think that view would be modified, but that was the reason why it was closed then.

8050. Are the women who attend this hospital mostly those who are leading immoral lives?—Yes, I think so.

8051. Those who acquired it accidentally or innocently would not go to this hospital?—I think the number that do so is a small proportion of the cases.

8052. What other hospitals in Dublin are there who can and do treat these diseases?—A lot of the other hospitals do treat them to a certain extent.

8053. To what extent?—They take in a few patients. Steevens' Hospital in Dublin has had a special ward since 1820 for venereal cases. It is a very small ward. It only contains six beds at the present time. It used to contain a good deal more.

8054. Is it usually full?—I think they are usually full.

8055. Is Steevens' Hospital well equipped and are they in a position to diagnose these diseases where they are a little obscure?—I think they are in a position to diagnose the diseases.

8056. And having diagnosed them they would pass them into this separate ward at once?—Yes, I think they are kept in that ward altogether.

8057. Can they give the best modern treatment in that ward?—Really I did not make inquiries on that subject. I saw the ward. It is quite a good ward.

8058. Are there any other general hospitals?—Yes; there are altogether in Dublin I think some eleven general hospitals.

8059. As many as that?—I think so. I could give you the names if you like; but there are eleven, I think.

8060. Will all those hospitals take venereal disease patients?—Most of them take in a certain number.

8061. They do not refuse such cases anyhow?—Yes, None of them take them in except to a very modified extent, and I think a very modified extent indeed.

8062. Have all these hospitals out-patient departments?—Yes.

8063. And the out-patient department would take anybody with any of these diseases?—The out-patient department will see any of those cases.

8064. Now we come to workhouse infirmaries. I suppose there are workhouse infirmaries in Dublin as well as the hospitals?—Yes, there are workhouse infirmaries in Dublin.

8065. How many?—Two of them.

8066. Do they treat these diseases?—Yes.

8067. Quite freely?—They admit them.

8068. Freely?—Yes.

8069. They have means to give the best treatment?—I do not think they have at the present time anyway. In fact, I know they do not give them salvarsan.

8070. They are not at present able to do that?—No, not in Dublin; and I do not know that they have any means of getting accurate diagnoses either.

8071. I do not know whether we have circularised these hospitals?—Yes, you have done so.

8072. I suppose we shall get what figures they can give?—Yes. I can tell you the number of cases that have been in each of these institutions during the last three years.

8073. You say: "The Poor Law dispensary system under which a large proportion of the population are treated for other diseases appears for some reason to be very little availed of by those suffering from venereal diseases." Why do not they avail themselves of the dispensary system?—I think in most parts of Ireland the person who suffers from venereal disease would prefer to go to a doctor who is not the doctor of the district in which he lives; they go to a neighbouring man. Of course if they go to any doctor outside their district they have no right to be attended under the Poor Law dispensary system; the Poor Law only attends to that locality. I mean they have to get a ticket. There is also another thing. I do not know whether it is of much effect; but there are records kept of every patient that comes to the Poor Law. Those records are kept by the medical officer, and they are submitted to the guardians once a month. I do not know how far that would do, but I think it may have some effect in deterring people from coming.

8074. With regard to Belfast, can you tell us what facilities for treating venereal disease exist there?—There are no special institutions. There is no lock hospital. There are two general hospitals in Belfast. There is the Royal Victoria and the Mater Infirmorum. In both these hospitals of recent years a comparatively few cases have been treated with salvarsan. I think both hospitals are quite in a position to do so; but in the Royal Victoria, at any rate, it is against the rules.

8075. Against what rules?—Against the rules of the hospital for the admission of venereal cases. But, as a matter of fact, that rule has not been observed, recently at least. Still, they do not cater for the treatment of venereal diseases. There have been a certain number of cases taken in, but they have not taken them in freely. They say they have not the funds, and I know that at the present time they have not the beds. They have part of the hospital built

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which they have not been able to open for want of funds. Of course, this salvarsan treatment means a considerable additional sum in the way of treatment alone as well as maintenance. I could not give you any figures; but I should say probably between 150 and 200 cases have been treated in the Victoria since the introduction of salvarsan and a fewer number in the Mater Infirmorum.

8076. These Belfast hospitals would also have out-patients' departments?—Yes, they have.

8077. And they would treat people?—They treat them; but the number of venereal patients that attend the out-patients' department in Belfast is very small.

8078. All these hospitals, I understand, depend to a large extent upon Government grants?—No, they do not indeed. I do not think either of the Belfast hospitals get any Government grant. In fact, I am sure they do not.

8079. But the Dublin hospitals do?—Yes, some of them do. The Houses of Industry, Meath, Steevens', the Lock, the Victoria Eye and Ear, the Cork Street Fever Hospital, the Royal Hospital for Incurables, the Rotunda, and the Coombe Lying-in Hospitals all get a subsidy. None of them get a very large subsidy except the Houses of Industry and the Lock Hospital. The total amount given to the Dublin hospitals is 15,850*l*.

8080. Do you know what the total cost of those hospitals is for maintenance?—The Westmorland Lock Hospital gets 2,600*l*. The total income of the Lock Hospital at the present time is 2,630*l*. I suppose there is some interest on accumulated money or something like that.

8081. (*Dr. Newsholme.*) All except 30*l*.?—The whole cost of maintenance comes from public funds except that some lady gave a pound per annum. Steevens' gets 1,300*l*. and their total income comes to 6,438*l*. The Meath gets 600*l*., and their total income is 6,113*l*. odd. The Cork Street Hospital gets 2,500*l*.; it is a fever hospital. Its income is 8,401*l*.

8082. It has 2,500*l*. and it spends altogether 8,400*l*.?—Yes. It is the fever hospital for Dublin. The Houses of Industry were established by Grattan's Parliament as well as the Westmorland Hospital. They get 7,600*l*.

8083. And they spend?—As far as I can see their total income is 9,535*l*. 17*s*. 11*d*. The Rotunda gets 700*l*. and has a total income of 9,421*l*.

8084. (*Chairman.*) I suppose these are fixed annual grants; they are not per capita in any way?—No, I think these are given regularly every year as the result of a report by the board of superintendence. The Coombe gets 200*l*. and their income is 2,367*l*. The Victoria Eye and Ear gets 100*l*. and its total is 5,108*l*. The Royal Victoria Hospital for Incurables gets 250*l*. and its total income is 8,696*l*. The only two hospitals that get any large proportion of their income is the Westmorland and the Houses of Industry.

8085. Coming to your suggestions, do you see any objection to a clear and open indication of the causes of death being made in order to make the Registrar-General's figures more exact where he has reason to think the real cause of death is syphilis?—I think it would be a very desirable thing; but I do not know whether you will get the medical practitioners to do it for you. They would have a certain amount of objection to giving a certificate to the family saying a man died of venereal disease. I think it might be very desirable if you could get it, but I do not know if you would be able to do so.

8086. You do not think if it is confidentially made?—If it is confidentially made I think you might get it done. I do not see any objection to it at all.

8087. I understand you do object to the notification of the existence of the disease in any individual when it is found out?—I do not think you would get it done. I think the medical practitioner who did it would get few patients troubled with venereal disease. I think possibly it would be quite advantageous, but I do not think you could get the medical profession to do it for you. If they did, I think you would have fewer people going to be treated.

8088. Suppose it were the law that they had to do it, and that it were made compulsory, or else they would break the law?—I think they might do that.

8089. Do you think it is desirable there should be compulsory notification of stillbirths?—Yes. I do not see what harm that would do, and I do not see any objection to it at all. With regard to stillbirths, I may tell you that except for the cities of Belfast and Dublin the notification of births is not in force in Ireland.

8090. There is no notification of births in the country?—There is no notification. Of course, there is the registration of births, but there is no notification to the public health authorities. There is a notification to the Registrar-General, but I do not know to whom he gives it.

8091. I gather you think Ireland is decidedly backward in the application of medical science?—No.

8092. You say "the provision of means to facilitate diagnosis by means of bacteriological examinations" is urgently required in Ireland?—I think so; but I would not say it was particularly backward. I do not know whether it is any more so than in England; whether the general practitioner has any greater facilities in England than he has in Ireland. I would be inclined to think he has not very much more.

8093. Then you think the needs of Ireland are very urgent?—I think the need for the practitioners in Ireland to have some means provided whereby they could send specimens to a bacteriologist for examination is very urgent. In two counties in my own district the county councils have appointed bacteriologists, in fact, three. Belfast has had one for some time, but the counties of Down and Antrim have both appointed a bacteriologist for the county. The Dublin County Council have adopted the same course. The medical practitioners whom I am constantly meeting tell me it is the greatest boon to them, and they are very pleased with it. It was they who urged it should be done. They derive great benefit from it. I suggest if there were provision all over Ireland in the same way it would be of the greatest advantage.

8094. You say that provision could be made at a moderate cost?—It could.

8095. Would you make it one considerable central institution or distribute institutions of a small kind about the country?—I think you would want more than one. I think we in Belfast could run one ourselves, and I think you could have one for Dublin, and possibly one for Cork; but I certainly think it would be better to have one in Ulster and one in the south at least. I think there is plenty of scope for the work.

8096. You say that a portion of the penny which is allocated for research under the tuberculosis sections of the Insurance Act might be used as far as Ireland is concerned in providing bacteriological assistance for the medical practitioners. What becomes of that penny now?—Nothing as far as I know as yet. I want to get hold of it if possible.

8097. It is accumulating to a large surplus which you want to get hold of?—I do not know that you could do anything much more serviceable with it to the community in Ireland. It would not amount to a very big sum in Ireland. I should say the whole of the penny would come to 3,000*l*. or 4,000*l*. a year.

8098. Then you would concentrate the research into tuberculosis in these institutions?—Yes, certainly. I think it would be a great advantage to have these institutions provided for bacteriological examination of all sorts.

8099. I see you are, as you have already explained, against the establishment of any other hospitals on the lines of the lock hospitals?—I do not think they would be very advisable.

8100. You think the present Lock Hospital in Dublin ought to start an out-patients' department?—I certainly think it would get more people to come to it; but I think it would depend upon what other provision you are going to make with regard to dispensaries.

8101. But would the best thing be to develop dispensaries or to develop the departments of the various hospitals you have told us of?—I think if you

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are going to develop dispensaries—and when I said “dispensaries,” I meant out-patient departments of the general hospitals—they would be a great advantage, I think, as regards getting hold of the men.

8102. You say that some arrangements should be come to with the general hospitals that they should provide beds for the treatment of venereal patients?—I suppose that means the grant would be expected to be increased for the special purpose of providing this treatment. I think unless you assisted them in their funds you would not get the general hospitals to take up the treatment of venereal diseases any more than they are doing. I do not think they would do any more. They have not money to do it with. I am taking Belfast. They absolutely have no more money. They have not enough money to treat the cases; they would like to do, and I do not think the subscribers or even the staff would be inclined to leave out general patients in favour of venereal patients. I do not think the general public of Belfast would at all appreciate that, and I do not think you can blame them. I mean these hospitals do a very large and valuable surgical work, and I do not think they would think of taking away any of their present beds for treating venereal cases.

8103. You say considerable additional grants would have to be provided to make use of these hospitals to a greater extent than they are now?—I think it would be required.

8104. You are against the segregation of female patients into a separate ward. You say it must have a demoralising effect. On the other hand, I suppose you would not put into a general ward women of the type who at present attend a lock hospital?—No. There is that difficulty. I think it is the great difficulty. I do not think the staff or governors of the general hospitals would consent to take in people of a drunken or really disreputable class. I do not think the hospitals would take them in, and I do not think the other patients would appreciate their being taken in; but with regard to the majority of women suffering from venereal, I think it would be most undesirable to segregate them into a special ward. I think if you do that you will not get the general practitioners to send the cases, and I do not think you will get the patients to go. At the present time hospitals are treating the cases in the general ward, and I do not see why they should not go on doing so. Any cases they treat are treated in the general ward.

8105. You think they only want encouragement of a general character?—They want more than that, I think. I think they want the weight of the strong recommendation of this Commission. I think it would take more than simply offering money. I would suggest that you made a very strong appeal to the hospital authorities to admit these patients, I know there would be a certain amount of objection to taking them in under any terms.

8106. And you attach importance to opening some of these out-patients' departments at hours which would suit the working classes?—I do. I think by that you would get hold of the male population.

8107. You say you have brought some returns with you. I have not seen them yet, so perhaps you will just give us the principal features of the returns you have brought from the military stations, and we will have them put on our notes?—With regard to the returns of the Army, the Army returns for Ireland compare unfavourably with those for the United Kingdom generally; and, as I said in that summary, this is largely, in fact entirely, due to the extreme prevalence of venereal disease among the troops stationed in Dublin.

8108. If you eliminate Dublin?—If you eliminate Dublin, I think there is no Command in the United Kingdom which has as good a record as Ireland; certainly not by their returns. The average for the five years ending 1913 for the rest of Ireland outside Dublin for all venereal disease was 43·6.

8109. (Rev. J. Scott Lidgett.) Per thousand?—Per thousand men.

8110. (Chairman.) Admissions per thousand?—Admissions per thousand.

8111. Not cases, but admissions?—No, admissions.

8112. (Rev. J. Scott Lidgett.) For the whole of the population of Ireland?—No, for the troops stationed in Ireland outside Dublin. The average incidence for the five years for syphilis for troops stationed in Dublin was 63·1, and for the rest of Ireland was 12·1.

8113. (Chairman.) What did Belfast give?—As far as I remember the incidence of Belfast was something like 28·6, as compared with Dublin 63. I am only speaking from memory. That is Belfast, and Holywood, which is a station 3 miles outside Belfast; but of course the number of troops stationed even in Belfast and Holywood is very small compared with Dublin. There are only 1,200 men in Belfast, and there are between 4,000 and 5,000 in Dublin.

8114. They are proportionate figures, and therefore comparable?—It is a proportionate figure, as far as I remember, of about 28·6 per thousand.

8115. (Sir Kenelm Digby.) Does the 63 include a certain area around Dublin?—No, Dublin only.

8116. (Canon Horsley.) But you would not call Belfast a garrison town?—No, there are only about 700 troops in it, and about 500 in Holywood. The number of troops stationed in Belfast during the past year was 780, and the number in Holywood was 535.

8117. (Chairman.) Then you deal with the cases of venereal disease treated in the infirmaries in the North and South Dublin workhouses. Will you give us those figures?—The number of cases treated in the Belfast infirmaries in connection with workhouses are, of males: 207 in 1911, 184 in 1912, and 119 in 1913. Then of females there were in 1911, 83; in 1912, 102; and in 1913, 141.

8118. That is an increase?—It is an increase on one side and a decrease on the other. In addition to that, there was the following number of children treated in Belfast in the female Lock Hospital: 26 in 1911, 13 in 1912, and 17 in 1913.

8119. Are those congenital cases?—Chiefly, but not altogether, I think.

8120. Now North and South Dublin?—In South Dublin, on the male side for the Dublin workhouse, there were 195 in 1911, 225 in 1912, and up to the 15th December 1913 there were 173. There are no female patients treated in the Dublin workhouse hospitals, for this reason, that they are all sent to the Lock. In the North Dublin Union there were 84 in 1911, 96 in 1912, and 96 in 1913.

8121. There is no symptom of diminution there?—No, there is no diminution worth while, and the provision for them in Dublin is not satisfactory. It is not attractive at all.

8122. You referred to a paper read by Mr. Meldon giving the number of admissions to the Lock Hospital since 1860. Would you state briefly the principal points of that paper as regards admissions?—The total admissions have fallen very much since the year 1906. You may say there has been a fairly constant drop. There was a very marked drop just about two years ago, at the introduction of salvarsan, which Dr. Meldon states in his paper was due partly to the general hospitals taking in cases. That is with regard to the total admissions. With regard to the first admissions, that is to say, the cases that go into the Lock Hospital for the first time, there has been a fairly steady drop too, but nothing like the drop which took place with regard to total admissions.

8123. It is that second curve which you attach most importance to, is it not?—The first admissions are far the most important; because although it was against the rules for them to return, if they left without permission. Still, in practice they were re-admitted.

8124. We may take it that your general opinion is that the treatment of these diseases in Ireland, and especially in the big towns like Dublin and Belfast, where they are so prevalent, is most inadequate at the present time?—I think so.

8125. (Dr. Newsholme.) I think the two main points in your evidence as regards recommendations are first of all, that there should be means provided for improved diagnosis, and, secondly, that institutional treatment should also be subsidised?—Yes.

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8126. On an increased scale?—Yes. I do not think, except the Lock Hospital, that they look upon what they are getting now as putting them under any obligation whatsoever to treat venereal cases.

8127. You regard those as the two main lines on which progress would be made in the treatment and prevention of syphilis?—I think these two should be provided if anything is to be done.

8128. Could you get on without those two in your opinion?—I do not see how you are going to get on without those two. I think at the present time there is a large amount of voluntary work done with regard to diagnosis. I do not know whether you will get that voluntary work kept up to the same extent as is done even now. It is somewhat tedious, and the men are interested in it—I mean the bacteriologists—but whether they will go on spending all the time that they are doing at the present time I think is doubtful, unless they get paid.

8129. Do I understand from you that in Dublin at the present time a large number of examinations of the spirochæta and a large number of Wassermanns are being done?—A very considerable number anyway.

8130. But do they touch more than the fringe of the cases that ought to be examined?—I think they do what they are asked to do, but I do not think they touch more than the fringe.

8130. But even those voluntary persons are doing now a great deal less than would be needed in order to get a full knowledge of the cases and get them treated?—You would want the general practitioner to have the right to its being done, instead of being under more or less the compliment of having it done. At the present time it is more or less of a compliment. Unless the medical practitioner is in close touch with the bacteriological departments he does not have these examinations done.

8132. So that you would go so far as to say that the general practitioner should be entitled to ask for these examinations to be made?—Quite so.

8133. Such measures would need to be subsidised. Have you formed any opinion as to by whom these subsidies should be granted?—We would like to get it out of the Treasury in some shape or form, of course. I think in the case of the two larger towns they might assist; but I do not know that they would assist. I think it would be harder to get the smaller towns and the boards of guardians to do it.

8134. You know the arrangement with regard to tuberculosis in England, that 50 per cent. of the cost comes from the local rates and 50 per cent. from the Treasury?—Yes.

8135. Do you regard that as a suitable arrangement in this case?—I see very strong objections to that, in this way. May I ask you a question to make myself clear? Are you asking with regard to the subsidy for bacteriological examination now only?

8136. I was classing the two together?—If you class the two together, I think there would be a great objection, if you ask a small town or a rural district to pay half the cost of treating a patient. If you go to a town with a population of 4,000 or 5,000, or a rural district even with a good deal bigger population, and say "We want to send a case to the hospital," it will be very soon known all through the district, even if you do not give the name, what patients have been sent up to Dublin.

8137. Shall we take it divided, so as to get rid of that difficulty. As far as bacteriological examination is concerned, would you consider it desirable that the county should pay half and the Government half, or what other arrangement would you suggest?—At present, as far as I can read the Tuberculosis Act, the Treasury is paying half. You are offering them no greater inducement than you are at the present time.

8138. The Government is paying nothing in regard to syphilis at the present time except in Ireland?—Excuse me. In Ireland we have a special Tuberculosis Act, and under one of the sections, I think section 16, the county councils are entitled to provide a bacteriologist for the recognition of tuberculosis and other diseases.

8139. That is under a special Act?—That is a special Act, and I think probably County Down and County Antrim will get half the costs from the Treasury. They ought to.

8140. But at the present time that has not worked in securing free provision of Wassermanns in various counties of Ireland?—It has not done so at all. Even in these two counties Wassermanns are not done, because Wassermanns were not part of the agreement.

8141. Do you think there is any reasonable hope of its being extended under present conditions?—I think it is not very likely you will get it done.

8132. In order that you might get it done, what additional suggestion would you make—that the Treasury should pay the whole?—Pay the whole. You have your 3,000*l.*, and I suggest that you should go partly towards it. I do not see how you can spend your 3,000*l.* in a more useful manner.

8143. I will come to that in a moment; but I gather from your evidence that as regards Dublin hospitals, about 16,000*l.* per annum out of their total expenditure of 59,000*l.* is already provided by the Government?—That is so.

8144. That is over one fourth of the total cost. In Dublin the fever cases are treated largely at the expense of the taxpayers, are they not?—Yes, that is so.

8145. Is there any other country in the United Kingdom in which that is done, do you think?—Are fever patients not treated always at the cost of the taxpayers?

8146. The ratepayers, not the taxpayers?—I do not know. As a matter of fact, these grants have been in existence since before the Union; certainly with reference to the Lock Hospital. They were provided for when we had a Parliament of our own.

8147. At any rate, there is this satisfactory point with regard to Dublin; that at the present time the central Government is contributing towards the treatment and prevention of venereal diseases in Dublin?—Directly. I mean, they are giving the whole of the cost of the Lock Hospital—every penny of it, except 1*l.* per annum.

8148. That you regard as a valuable precedent, perhaps, for the rest of Ireland?—Certainly.

8149. On the question of research, you would like the pennies, which would make up about 3,000*l.*, for research under the Insurance Act, to go for these routine bacteriological laboratories?—We are a very poor country, and I think we might spend it on that quite well.

8150. You have no ambition to find out new facts about disease and get more power for the prevention of disease. That is not a correct version surely?—No, I would not say that is a correct version. I think that would be a very valuable help with regard to stopping tuberculosis.

8151. You would be willing that out of 57,000*l.* only 54,000*l.* should be spent on research, and your 3,000*l.* spent on routine bacteriological work?—I think we personally would derive quite as much benefit from that as from any other way of spending it. That is a personal opinion of my own.

8152. But if you can get 3,000*l.* for routine bacteriological laboratories from another source?—All the better.

8153. Of course you might possibly be told the routine laboratories do not come within the legal definition of the word research?—That might be.

8154. With regard to the use of these general hospitals, you would like the persons of dissolute character to be separated from other persons suffering from venereal disease?—It would not matter what I would like. I think the hospital authorities would be very loth to take in people of dissolute character, who were degraded; that is to say, who were drunken, or who used improper language in the wards, and that sort of thing.

8155. But is it not extremely important to get that particular class of patient treated, and promptly treated?—I think it is most desirable; but I do not think the general hospitals will do it for you.

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8156. If you have two hospitals for the treatment of the same disease, and a patient one class comes to the first class hospital, and you say to her, "You must go back to the second-class place," is it likely she will go under those conditions to the second-class place?—I think it would not be very easy to make her; but I do not think your hospital will do it for you. I do not think, at any rate, they would take them into a general ward. I think the other patients would object.

8157. May I ask this. Is it necessary that they should go into a general ward? Would not separate wards, rather than separate hospitals, meet the needs of the case?—You mean 10 or 15 patients in one ward?

8158. Yes?—No. I do not think so personally. I think if you put in 15 women suffering from venereal disease you will get people of very different character, and I think you will contaminate them all.

8159. But why have 10 or 15 beds; you might have cubicles; you might have three or four?—Even with three or four. I think if you could have it one or two, possibly; but I think if you have three or four it is objectionable. I think if you have three or four, and send in a married woman amongst them, she will ascertain what she is suffering from, and I do not think your private practitioner would send her in.

8160. Then on the whole you retain your opinion that for the dissolute class it is better to have a special hospital, which is a Lock Hospital, although it may not be called a Lock Hospital?—I would suggest that I would see no objection, and I think it would be an advantage, to have a special ward for the dissolute women in a general hospital. I do not think a general hospital will take the dissolute women who are drunken, or who are liable to use abusive or improper language at least. They would not take them into the general ward for you.

8161. I gathered you thought that the out-patients department in a general hospital might attract a considerable number of men to be treated promptly and efficiently?—I think that is so.

8162. But have you the same hope with regard to women?—I have not.

8163. Would you mind explaining to the Commission why you do not think these out-patients departments, even in the evening, will attract women?—I think the recommendations I have made fail in this; that I think you will not attract a very large proportion of the women. I think you will attract a very small proportion of the women to your out-patients dispensaries, and so get them under treatment, for several reasons; first of all, a large number of the women who suffer from venereal diseases do not know that they suffer from venereal disease, and, secondly, the women, in the early stages at any rate—I am talking now primarily of syphilis—suffer very little inconvenience, and so would not go. They would not go until they suffered serious inconvenience, which is considerably later in the disease. Thirdly, I think the women will object to go, for several reasons, to those out-patients departments, no matter when or how convenient you make it. I think you will have the greatest difficulty in getting hold of the women.

8164. That brings us up against one of the main difficulties in the whole question. It is fairly easy to get the men to go for treatment?—Quite.

8165. It is fairly easy, therefore, to stop their infection; but confining yourself to syphilis, the symptoms of the woman being relatively slight?—Almost nil in the early stages.

8166. You think you cannot get her for treatment. Then your recommendations as put forward here do not meet that particular extremely important point?—They do not.

8167. Have you any further suggestions which would meet it?—I think you would get into touch with your female patients sooner, and many more of them, if you could get your general practitioner to undertake a sort of public health campaign with regard to this disease.

8168. I would like you to explain that. How could the general practitioner be utilised; because, *ex hypo-*

thesi, the woman has not gone to a medical man, not having had very serious symptoms of the disease?—I would suggest, if, instead of your dispensaries, you try and get hold of all these cases through your general practitioner, your general practitioner might get you into earlier touch, through his male patients, with the female.

8169. So that it would come to this: that the man suffering from a primary chancre goes to the general practitioner before coming to the dispensary, or goes to the dispensary if you like?—If you do not make a point of your dispensary except for poor persons, he goes to the general practitioner, as he does at present.

8170. Then his own practitioner inquires of the man, where he was 28 or 30 days previously when he acquired this chancre?—Yes.

8171. He finds that out. Then will you follow it on from that point?—I say that I think you would get into much closer touch with your patient who had syphilis if you tried to get hold of these cases from your general practitioner. He gets a male patient with a primary sore. He inquires from the patient the source of this sore, and he takes this male patient to a special hospital for treatment, and for doing so I think you would require to pay him a fee. He also might inquire from the male patient where he got the sore, and induce him to bring the female person to him also, and he should also bring her to the general hospital for treatment, and, if necessary, get her treated there.

8172. That is very interesting; but let us imagine this particular man has acquired this sore in a particular tenement in a slummy part of Dublin. Imagine he has had a fee to go to that tenement dwelling to the woman, and ask her to come to see a doctor. What would be likely to be the consequence to the man, can you imagine?—I think in some cases you would have difficulty, and they would not do it; but I think in a good number of cases you would get it done.

8173. You think there might be friendly relations which would induce that woman to come and be treated?—I think the man might be persuaded to bring her.

8174. Is there any other way of doing that except the way you suggest, through the man himself acting as a volunteer agent, or, if you like, acting as a good Samaritan, to bring the woman for treatment? Have you any alternative suggestion beyond that?—He would not give the information unless you got it from him voluntarily.

8175. So that if you had a case notified to the medical officer of health, and he were to inquire, he would be in a much worse position than the practitioner?—Far. Besides that, she might be induced by the practitioner to go to the hospital; but I do not think she ever would be induced by the public health authorities to go to hospital. I mean the ordinary practitioner could get into friendly relations with the patient and tell her the seriousness of her disease and induce her to go to hospital.

8176. So that, although your proposal might not always succeed, and, in fact, might often fail, the alternative proposal of going through the public health official would be much more likely to fail?—I think it would succeed very seldom.

8177. Then what is to induce the practitioner to act in this way; to attempt to get the woman under treatment as well as the man?—I suggest that you should pay him a fee for bringing the man to hospital, and for seeing that he remains under treatment and goes back to hospital again, and that you should also pay him a fee—and an increased fee—for the woman patient he brings. I think the number of cases that you would get of the women patients in the early infective stages would be very few, unless you adopted some course such as I suggest.

8178. So that the man is to be paid for the information he has brought and for losing his patient if he is handed over to the hospital for treatment?—Yes, that is so; but I think part of this treatment might be carried out by the medical practitioner. I do not think the giving of salvarsan, at the present time at any rate, is likely to be done very largely by the private practitioner among poor class patients.

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He could not get the price of salvarsan from a lot of these people very easily.

8179. So you suggest that the patient should go to the hospital for salvarsan, and then be handed back to the private doctor for treatment?—I see no objection to that, and the patient might pay the private doctor for that part of the treatment. Of course in the case of poor people, I think the State ought to treat them as they are doing at the present time.

8180. That would mean, of course, paying the private doctors for treating poor persons suffering from venereal disease?—Paying them for taking them to the hospital and seeing that they remained under treatment, and get proper treatment.

8181. Then when they came back after having salvarsan, pay them for taking the other treatment?—Let the patient pay them.

8182. If he could afford it?—Yes, if he could afford it, and I think most of them do afford it now for a certain time anyway. I admit they often do not go on for long enough.

8183. What proportion of the total population of Ireland is treated under the present dispensary system? Can a figure be given, or is it not possible?—Would it be a tenth or a twentieth, or a fifth, or what?—I gave the figure for Belfast.

8184. It is probably more than half the population, is it not?—No, I would not say that at all. As I told you, out of a population of 400,000 in Belfast, there are between 45,000 and 50,000 medical relief tickets issued during the year.

8185. That is a tenth?—That is only a tenth. In Dublin it is considerably more.

8186. I do not think you need trouble about the exact figures at present. But this dispensary system is also a State-subsidised system?—Certainly.

8187. The dispensaries are not supported out of the Irish local funds?—No, not altogether. Not quite half is paid by the Treasury. There was a standard year, the year 1892, and the rate that was being paid then is going on still for half the cost.

8188. So that about half the cost of the general treatment of the poor people of Ireland, whether they are paupers or not?—They are supposed to be poor persons.

8189. Are you sure of that?—Yes, poor people.

(Dr. Newsholme.) Yes, poor persons.

8190. (Mrs. Creighton.) Are they disfranchised?—No, certainly not.

8191. Then they are not paupers?—I do not know that that is the definition. They are supposed to be poor people.

(Dr. Newsholme.) In England also they need not be disfranchised, although they are treated under the Poor Law?—No, they certainly are not in Ireland.

8192. (Canon Horsley.) And never were?—Not that I know of. I am quite sure they are not disfranchised.

8193. (Dr. Newsholme.) At any rate, you have throughout Ireland a system by which a very considerable proportion of the population is treated medically at the expense of the taxpayer?—Yes, the taxpayer pays a proportion. It is from some special fund. I do not know what it is.

8194. About half the total cost is paid by the taxpayer?—From some special fund that was given over for this purpose.

8195. It is paid by the taxpayer of the United Kingdom, and not of Ireland alone?—It is paid by the taxpayer of the United Kingdom. It is from some special fund. I forget what it is.

8196. So that in Ireland you have gone a very long way indeed in the direction of a State system of medical service?—We have.

8197. You have no panel system in Ireland under the Insurance Act, have you?—We have no medical benefits under the Insurance Act.

8198. Have any systematic Wassermanns been done in Belfast or elsewhere?—Yes, when I say that, I have a return from one of the medical gentlemen which does not agree with my estimate of the prevalence of syphilis in Belfast. He got 66 consecutive women gynaecological patients attending the Ulster Hospital for women and children, and of those 66 cases that

were tested, 27 gave a positive result, 4 a doubtful result, and 35 gave a negative result.

8199. Out of 66 consecutive gynaecological cases 27 gave a positive Wassermann?—Yes.

8200. Are those hospital cases?—Yes, they are hospital cases in a poorish part of the town.

8201. Are these in hospital or out-patients?—Out-patients.

8202. And they were attending the out-patient department for some special diseases of women?—Yes.

8203. I think you said they were taken consecutively, not selected?—Consecutively; they were not picked cases.

8204. (Sir Kenelm Digby.) These were not cases sent for venereal disease?—No.

8205. (Dr. Newsholme.) That, of course, is a small number to base any conclusion on?—I think an unfairly small number.

8206. But it does not bear out the impression that in Belfast there is not much venereal disease?—If those figures were found over a much larger number it would make you very much doubt my evidence.

8207. I think somewhat similar figures have come from Glasgow?—Yes; our proportion is not quite as high as that in Glasgow.

8208. (Mrs. Burgwin.) You state, "I believe that venereal diseases are almost non-existent in the rural portions of Ireland." To what do you attribute that splendid result?—Partly, I think, because there is very little immorality in the rural portions of most of Ireland, at any rate. In fact, I might say, I do not think there is very much immorality in Ireland, as a rule, outside the large towns.

8209. But is it not a fact that it is from the rural districts you draw your young people, both men and women—your emigrants?—Quite so. A large number is drawn from it; but still I do not think they are immoral. Almost all the medical men I come across in the country districts tell me that venereal diseases are not prevalent in rural Ireland. May I give you an example in support of that. This is a letter I had from Dr. Martyn. He said: "I have had 33 years' experience and have a thorough knowledge of the town and district."

8210. Where is that?—Sligo. "I can candidly state that venereal disease is almost unknown in these parts. Now and then a tramp or such like might turn up with it, but that is a novelty. This is a remote town, yet one never finds among the natives a case of syphilis and seldom gonorrhœa. I know the union officials in the hospital and I have seldom heard of a case." This is another: "I am surgeon in His Majesty's prison, and I never saw a case in town or country suffering from venereal disease. Now and again a tramp may come in suffering from soft chancre or gonorrhœa; and I serve five counties." I have any amount of evidence of the same character.

8211. Could you give us any idea of the age at which these people marry. Take Sligo or any place like that?—I could not give you statistics as to the age of marrying; but I may tell you that in rural Ireland usually the age of marrying, from my personal impression, is an old one. That is very markedly so among the Protestants in the north of Ireland. They wait until they are pretty well on in years before they marry, or most of them do, especially among the farmer class. I think among the farmer class all over Ireland they are very apt to marry very late.

8212. But, leaving out the Protestant element and coming more to the Catholic element, surely the marriages, especially in the west of Ireland, are earlier. Speaking from my own experience, I think many of the girls were married at 16 years of age?—Among the farmer classes?

8213. I do not know about that?—The girls may have been, but I do not think the men are. The men wait later. The girls marry very young and they marry very often elderly men. At least, that is my personal impression.

8214. I asked the priests in many parts, and they said they always advocated early marriages, and I

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wondered whether the early marriages and the emigration of the young people would account for the non-existence in the rural districts?—I do not think so.

8215. You think it is a high moral tone which exists among the people?—I think partly that is so, anyway.

8216. Could you tell me from your knowledge if quackery abounds in Ireland?—I do not think quackery does abound much in Ireland; but I do think a good many cases of venereal disease are treated by chemists. That certainly occurs in the towns.

8217. I mean you do see in the Irish press a good many advertisements of quacks for certain diseases—diseases of women and so on, do not you?—You do. You see a certain amount, I do not think there is a tremendous lot. I think we get most of our quack medicines from across the water; at any rate, a good deal of it.

8218. The quacks are here and the dupes are over there; is that it?—For the most part; but I think most of the quack medicines come from England; there are not many manufactured in Ireland.

8219. Still, these drugs or herbs are sold there?—Of course, they are sold there, and sold to a very considerable extent.

8220. You see, the regular practitioner would not come across the people treated by those quacks until late?—They certainly would not. I mean, the chemists get a very considerable proportion of these early cases, I think, and I do not think it is very desirable.

8221. (*Sir John Collie.*) Would you go the length of saying it was very undesirable?—Yes, I think in the case of syphilis it is very undesirable if you are going to get modern treatment.

8222. Would you agree that a large proportion of the cases of parasyphilis one sees is the result of imperfect treatment by quacks and chemists. Perhaps you have not sufficient knowledge of that?—I have not sufficient knowledge of that, and I do not know how I could have. It would be very hard to obtain sufficient information on which to base an opinion.

8223. Other witnesses have given us that impression, and that is why I asked?—I think it is very likely, but I have not the knowledge.

8224. With regard to those 66 consecutive cases in the gynæcological wards, 27 of whom were found to have positive Wassermanns, that would indicate they had syphilis, would it not?—Certainly.

8225. It would give no indication of the other conditions, due to gonorrhœa, for which probably a large proportion of these women were attending?—There is no doubt about it. My personal impression is that gonorrhœa is a most serious thing in a female.

8226. A large proportion of the cases of these women coming up are due to syphilis, and a large proportion also due to gonorrhœa?—Yes, and a large proportion suffer from both.

8227. So that the 27 cases really do not indicate the amount of disease there?—It probably does not indicate the amount in those 66 patients; but I think it is too small a figure to base results on.

8228. I do not suggest it does; but I think we ought to recognise that that only represents the amount of syphilis, and not the amount of venereal disease?—That only represents syphilis, and nothing else.

8229. Were most of the general practitioners who formed an impression about the incidence of syphilis in Ireland, men who were well over 60 years of age?—All classes. The men who gave me the impression that syphilis was less severe and less prevalent were chiefly men who had been 30 or 40 years in practice, such as Dr. Thompson, of the County Infirmary of Tyrone; Dr. Donovan, medical superintendent of Cork; and Dr. Boyd, medical officer of the County Infirmary of Donegal.

8230. You compared the present amount of syphilis with that of 100 years ago, and you said that in your opinion it was less, and you based your opinion upon the statistics of the Lock Hospital?—I do not know that I did say it was less.

8231. I thought you said there was very much less venereal disease compared with, say, 100 years ago?—No, I did not. I said the number of cases that were admitted to the Lock Hospital 100 years ago were very large indeed. At one time I think there were about an average of 5,000 cases per year treated in the Lock Hospital for all venereal diseases, and probably some of those included scabies as well.

8232. Were those admissions larger than at the present time?—Yes. At one time there were 300 cases, and in a report that was made at that time it was said they did not take in one sixth of the total number of cases that required admission.

8233. Precisely so, then you say that there was a larger proportion of admissions of venereal disease 100 years ago than at present?—Far more to the Lock.

8234. That was my point. Do not you think that the habits and customs of the people, the mental attitude towards entering hospitals, the fact that both sexes at that time were received, and only females are received now, apart from anything else, must have a very material influence upon the incidence of the number of patients who were admitted at that time as compared with the number admitted at present?—I quite agree it might account for a large number, but I do not think it would account for it all.

8235. Further, there were two sexes at one time, and only one sex at the other?—If you had 300 cases in, and if, as the Parliamentary Report stated, they did not take in one sixth of the cases clamouring for admission, and you multiply the 300 by six, it would mean a lot of people were wanting to go into the Lock Hospital at that time.

8236. But it gives you no indication which sex was clamouring and which was refused?—No, it does not.

8237. Then do not you think that the custom of the people at that time with regard to admission into a Lock Hospital must have changed within the last 100 years?—I do not know that it has varied very much—not in our country anyway, judging by the report made by the Dublin officials at that time.

8238. I think you see the difficulties; would you agree, assuming it were possible to treat cases of venereal disease in general hospitals, without the stigma of a venereal disease, that such a course would be distinctly beneficial in reducing the amount of disease that is prevalent. Other witnesses have indicated this?—I think it would be beneficial, and I cannot see why a certain number of them, at any rate, should not be treated in the general hospitals. You cannot have too many of them in any one ward if you have it like that, or else it becomes objectionable. At the present time a large number of the general hospitals are taking a small proportion of their cases into general wards.

8239. I think you will agree there is nothing like the adequate treatment of the disease at present?—No, I do not think you will make much impression on the disease unless you extend your hospitals.

8240. (*Canon Horsley.*) At the time there was such a very large number of patients at the Lock Hospital were there as many general hospitals in Dublin as there are now? The Lock Hospital is one of the oldest hospitals, is it not?—Yes.

8241. Are most of the Houses of Industry 100 years old?—Yes, they are, and Steeven's Hospital is 100 years old. Sir Patrick Dun's, I think, is 100 years old; but I do not know.

8242. Were they all 100 years ago as ready to receive venereal cases as they are at present?—I do not think they are very ready to receive them at the present moment.

8243. They are taking them now, you say?—Very few.

8244. Still, you have not got what we have in London, hospitals who absolutely refuse to take them?—No, but I think some of the hospitals take very few indeed.

8245. We have hospitals who will not take them at all?—I think all of them would take a small number.

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8246. All I meant was, that that might account for the tremendous drop; that they would be able to be received in more places, whereas at one time it was practically only one?—As a matter of fact, I have a return here of the number that are returned to the Board of Superintendence who have been taken into five general hospitals, and the total number is very small.

8247. Do I understand the homes of industry are hospitals and nothing else?—Yes, purely hospitals.

8248. The words would suggest to our minds a workhouse?—That is not so at all.

8249. They are pure hospitals?—Pure hospitals. One is a fever hospital, one is a surgical hospital, and one is a medical hospital, but they are purely hospitals.

8250. With regard to the general morality of Ireland, which we all know is much greater than that of England or Scotland, as shown by the illegitimacy rate as well as this, when disease is almost non-existent in the country, that works two ways, does it not? I mean, there is very little of it, and therefore people know very little about the diagnosis and treatment?—There may be more of it than people know, I quite agree with you.

8251. This afternoon I met a Member of Parliament, an Irishman by birth, who told me that his family doctor told him he had only had one case of gonorrhœa, and none at all of syphilis, in 40 years. That, you think, might be quite possible?—I have met men who have been in large practice who say they have not seen it in years and years.

8252. This came from Kildare. In that case it would not only prove great freedom from disease, and purity, but also suggest that the ordinary practitioners would not know much about it if there were a case?—I think they would all recognise gonorrhœa in the male, but they might not always recognise syphilis, any way the later stages.

8253. Generally it is the case all over Ireland that there is not so much of the disease as elsewhere. It is very remarkably happily free?—I cannot compare it with rural England; but certainly I think rural Ireland is remarkably free.

8254. And more so than rural England probably?—I could not give you any comparison.

8255. It may be, while primary cases are diminishing, the effects of the older generations are now coming out?—Yes, that may be so; but I do not know that the primary cases are diminishing very much during the past few years. I do not know that the primary cases are diminishing very much in any part of Ireland during recent years.

8256. That witness thought it was decreasing, but that there was an increase of deaths from G.P.I. Taking 20 or 30 years ago, when those were infected, you might have a present decrease of the disease, and yet have an increase in the deaths from the previous generation of the disease?—Yes, that is so.

8257. That might account for an increase there?—Yes; it might account for an increase among G.P.I. and locomotor ataxy cases.

8258. (*Mrs. Scharlieb.*) Do you see anything of congenital syphilis amongst children?—I was surgeon at the Children's Hospital in Belfast for many years, and I saw a certain amount of it, but not a large amount. I went through the books of the Children's Hospital in Belfast for the last year, and I found a very small proportion of cases. I think it was about 10 cases out of 3,000. On the other hand, I was told by two of the officials that were attending the Temple Street Hospital for Children in Dublin that the number of children attending that hospital suffering from congenital syphilis was very large, and I was told by two of the surgeons connected with the Victoria Hospital for the Eye, Throat, and Ear in Dublin that they saw a large number of congenital cases of eye trouble through syphilis.

8259. And also deafness?—Yes, also deafness.

8260. Do you see cases of juvenile general paralysis?—I personally have never seen a case that I recognised as being due to syphilis; perhaps I did not realise that.

8261. Then, of course, you would argue that if there is a great deal of congenital syphilis there must

have been a great deal of acquired syphilis beforehand in order to produce it?—Yes, I think that is so.

8262. So that possibly the gentleman who was mentioned to us just now who had seen only one case of syphilis and no case of gonorrhœa in an experience of 40 years, had really not looked for it?—It might not have been in his district. If his practice was limited to a rural district he might not have seen it; he might have skipped it. But I do think there are parts of Ireland where venereal diseases are almost absolutely unknown, and where a man might live for many years without having seen it.

8263. Do you attribute that to the greater hold religion has on them, do you think they are more religious?—I think that rural country people are a moral race.

8264. That is quite satisfactory?—Yes. I think they are a very moral race.

8265. (*Mrs. Creighton.*) You spoke of the large maternity hospitals in Dublin. Are there more maternity hospitals there than there are in Belfast, for instance?—There is no comparison. I do not think there is any place, I will not say in the world, but I do not think it is at all likely that there is any place in the United Kingdom where there is such an enormous lot of people attended at the maternity hospital. The Rotunda Hospital itself takes in a large number of cases, and I have the return of the number of cases. The Coombe Hospital takes in a large number of cases, and so does the Hume Street Hospital.

8266. How are those hospitals supported?—Practically speaking altogether by the Dublin public, and a certain amount by legacies.

8267. But these are more directly dependent on subscriptions than the other hospitals you spoke about. They have no State grant?—I said the Rotunda Hospital had 250*l.* or something like that.

8268. But they are supported largely by private subscription?—Yes, almost altogether supported.

8269. Do unmarried girls come from the country to have babies there?—I have no doubt they do; in fact, I know they do. I was a student there myself, so I know they do.

8270. So that in such a hospital there would be a very fair number of venereal cases?—I have no doubt there must be. I did speak to one of the medical officers, and he did not seem to think that there was a lot; but of course there must be a considerable number.

8271. No special effort is made to diagnose those cases, is there?—I do not know that there is. I do not know that they have interested themselves very much as yet; anyway, they stay in a very short time. They are only in the hospital altogether for eight or ten days.

8272. Of course for the detection of disease in congenital cases, it would be most important to have them examined?—It would be a very good thing if they did do so; but in the cases of females at any rate they would require to have primarily all the cases submitted to a Wassermann reaction. I do not think they would know in the case of females unless they did so.

8273. You spoke about those hospitals probably being a large source of supply for prostitutes in Dublin?—I did not mean to convey that. I do think if girls come up from the country it is quite likely, and I am quite sure it does occur, that some of those people go on the streets afterwards.

8274. Do you happen to know whether there is any attempt to care for those girls afterwards, and to see that they do not drift on to the streets?—That I do not know.

8275. Then I gather that the women on the streets are not very ready to go into the Lock Hospital?—No, I do not think they are at all.

8276. Have you heard of any desire in Dublin to change the name of that hospital, and get rid of the word "Lock"?—I have heard the name objected to; but I think whatever name you gave it, it would very soon be recognised that it was a hospital entirely for that disease.

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8277. Do you happen to know whether there is any special dread of the name "Lock" among that class of women?—No, I could not tell you.

8278. The women who do go there are already in a very advanced stage of the disease, are they not?—No, not at all.

8279. Not necessarily?—Out of 260 cases, 103 were in the primary or secondary stage, that is, within a year or two of the time of being infected.

8280. Do you believe if the hospital were made more attractive and brighter, the women would be more ready to go?—Possibly to a certain extent; but if you remove it from a central place like its present situation into a place which you could make very much more attractive, or where you could give them more grounds, it would not be convenient.

8281. You spoke of a very large decrease of admissions of females in Belfast, corresponding with a very large increase in the admission of males. How do you account for that?—I really think those returns I gave for Belfast are over too short a time to draw much deduction. There were more women came in, but I think it might vary again in a year or two just the same.

8282. You mean there were more men came in; there were a large number number?—You mean in Dublin?

8283. No, it is Belfast. The figures you gave showed that the decrease in the admission of females was very marked, and the increase in the admission of males was equally marked?—No, I think it is the other way about. The increase was in the females, the decrease was in the males, in Belfast. My figures for Belfast in the case of females are 83 for 1911, 102 for 1912, and 141 for 1913; for males they were 207, 184, and 119.

8284. But you say they are over too short a period to draw any deductions?—I think so, altogether. I think those figures might change again.

8285. We should be correct in deducing from your evidence that the great majority of women with venereal disease are not treated in institutions?—I think you may take it a large number of women at any rate are not treated in any institution, and some I am quite sure are not treated at all during any of the early infectious stages.

(Mr. Lane.) I have no questions.

8286. (Sir Almeric FitzRoy.) Is not the morality of the rural classes in Ireland largely due to the influence of the Catholic priesthood?—I think that is so.

8287. Is the standard of morality as high amongst the Protestant population in the north?—I think we

The witness withdrew.

have more illegitimate births in the north. That of course is partly due to the fact of its being more a manufacturing centre.

8288. That may be so; but in the south-west part of Scotland, which is nearest to the north-east part of Ireland, the rate of illegitimate births is the highest in Scotland?—I do not know whether it is the Scottish element or not; but I certainly do know that there are more illegitimate births in Ireland in the north than in the south.

8289. Would you not be inclined to think it may be due to the prevalence of the Scottish element in the population of the north-east of Ireland?—I think it is possible.

8290. Had you anything to do in connection with your department with the preparation of that memorandum about unqualified medical practice in Ireland, which was supplied to the Privy Council not long ago at the request of the Lord President? Do you know anything about it?—I know nothing about that.

8291. Because in the preface prefixed to that which was drawn up in the Local Government Office in Ireland, it was stated "Unqualified practice is reported as existing to some extent in the dispensary districts of 137 out of 158 Poor Law unions in Ireland, and has increased somewhat in 38 unions." Is that in accordance with your own impression?—I am really not quite sure about it—I would doubt that except it in the case of chemists—that there was very much quackery in Ireland.

8292. Chemists are mentioned; but there are other forms of unqualified practice described?—I would not have thought there was a great deal of it in Ireland.

(Sir Kenelm Digby.) I have no questions.

8293. (Chairman.) I suppose among the causes of this immunity of rural districts in Ireland from disease, must be the cause of the large emigration of young men and young women at the dangerous age?—Of course that would have a certain amount of effect.

8294. It must be a contributing cause?—It would be a contributing cause. Of course you get these people, as you say, at the dangerous age, leaving the country and going abroad.

8295. And the number of young men and young women of that dangerous age in proportion to population by reason of emigration is probably less in Ireland than in any other country?—I should think it is certainly very much less. We do not keep many people who are not actually employed in the rural districts; most of the unemployed go.

(Chairman.) Thank you.

TWENTY-SECOND DAY.

Monday, 2nd March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

The Right Hon. Sir DAVID BRYNMOR JONES, K.C., M.P.

Sir KENELM E. DIGBY, G.C.B., K.C.

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.

Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.

Mr. ARTHUR NEWSHOLME, C.B., M.D.

Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.

Mr. JAMES ERNEST LANE, F.R.C.S.

Mrs. SCHARLIEB, M.D.

Mrs. CREIGHTON.

Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Mr. D'ARCY POWER, M.A., M.B. (Oxon), F.R.C.S., called and examined.

8296. (Chairman.) You are surgeon to and lecturer on Surgery at St. Bartholomew's Hospital?—I am.

8297. How long have you been there?—Teaching, or as surgeon?

8298. As surgeon?—Since 1898, as a teacher since 1878.

8299. You are also editor, conjointly with Mr. J. Keogh Murphy, of "A System of Syphilis," in six volumes; a member of the Council of the Royal

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[Continued.]

College of Surgeons of England; a former member of the Council of the Royal Society of Medicine; and consulting surgeon to several hospitals in and near London; that is so, is it not?—That is so.

8300. You come to give evidence at the request of the President and Council of the Royal College of Surgeons of England and the President and Council of the Royal Society of Medicine, about the effects of venereal disease as they are seen in general surgery and in the great teaching hospitals of London?—I do.

8301. So that we may take your views as representing the views of those two societies?—I think so.

8302. By venereal disease you understand gonorrhoea, syphilis, and chancroid; those are the three divisions?—Yes, those are the three divisions in this country.

8303. And you say that the soft sore is unimportant, except so far as it masks the early diagnosis of syphilis. But I suppose now, with the methods of testing that we have, that does not hold the same force as it did formerly?—Not with the same force amongst the better educated medical practitioners; but I take it amongst the general practitioners it still does not hold, largely.

8304. But the means are now available for distinguishing between soft sore and *bonâ fide* syphilis?—Yes, in large towns. In the country I take it that does not hold yet.

8305. But we are in a much better position now to make the diagnosis, and the two diseases could not well be confused if adequate tests were brought to bear upon them?—If they are applied, but they are not very often applied.

8306. Then you have come to the deliberate opinion that gonorrhoea is the more serious disease to the individual, and that syphilis is the more serious disease to the race?—I have.

8307. Coming to gonorrhoea, you say that in general surgery the effects of gonorrhoea are very far-reaching, and that it was an error to teach that it was a local and curable disease. Would you give us some idea of the far-reaching effects of gonorrhoea?—Yes; a boy contracts gonococcal infection when he is about 18 or 19, and he might not have stricture, for instance, until he is 60 or 70. I call that very far-reaching.

8308. And as regards diseases of women, I suppose we must regard it as a very serious disease?—In general, I think so. I am not so competent to tell you about that; it is not my special branch of work.

8309. Then you say it is an error to teach that it is a local and curable disease. You mean, that has been too much the medical view in the past?—Yes.

8310. But that now it ought no longer to be regarded as a local disease alone, but a disease which may affect a large part of the system?—It does affect many other parts: for instance, joints and eyes.

8311. As regards its curability, are we in any better position to treat it now than formerly?—Yes, a good deal; we can use vaccines now, which are often serviceable.

8312. Do you think the vaccine treatment can be pronounced a success?—It has helped materially in the cases where I have tried it lately.

8313. Can we say now that gonorrhoea is a curable disease if it is treated in sufficient time?—If it is cured, yes.

8314. It is curable?—It is curable in that sense; if people take sufficient time and trouble about it; if they will go through the whole course of treatment.

8315. Then would you give us some evidence as to the cases that you have had to treat in your surgical wards?—Yes. I think they run chiefly into joint troubles as far as one knows in general surgery, and I am only speaking of general surgery, and some cases of peritonitis, but that is not quite so common.

8316. You speak of acute and chronic pelvic inflammation in both sexes; which you trace to gonorrhoea?—Yes; acute inflammation of the prostate gland and glands at the base of the bladder, and acute inflammation of the bladder itself all result from it.

8317. You also mention urethral stricture, causing chronic inflammation of the bladder and kidneys; that, you say, is a common occurrence?—A common occur-

rence and a very remote result; it is a very remote result, many years afterwards.

8318. After the original infection?—Yes, 30 to 40 years afterwards.

8319. And that may lead to the death of many people?—It does lead to their death, and to very material impairment of their health.

8320. I suppose that cases of deaths from diseases of the bladder and kidneys would never be returned as having any connection with gonorrhoea by the Registrar-General?—We had a very interesting question brought up the other day at the Historical Society of Medicine. There was a discussion as to the cause of Oliver Goldsmith's death. Oliver Goldsmith died of inflammation of the kidneys and bladder, but the original trouble as we interpret it was from this gonococcal infection, and, therefore, years and years afterwards, he died of an old-standing chronic infection.

8321. May we take it there are a great many deaths and a great many diseases which may be traced to gonorrhoea and are not generally recognised as having that connection?—Yes; except by those of us who are working at it. If you read between the lines it is easy enough to tell.

8322. Is gonorrhoea easy of detection at all stages?—Yes, in the early stages.

8323. In both sexes?—Quite easy in both sexes.

8324. And would the general practitioner in the country have sufficient knowledge to be able to say at once: "This is a case of gonorrhoea"?—As we are educating them now. Of course, we now educate them in bacteriology, but 30 years ago I do not suppose they knew; there were not any means of discriminating.

8325. Then you wish us to regard gonorrhoea as a very serious disease?—I do.

8326. Demanding early and efficient treatment?—It is a much more serious disease than it is generally considered to be.

8327. Now we come to syphilis. You regard syphilis as being more dangerous to the State than to the individual?—I do, definitely.

8328. That means the consequent result of syphilis in the acquired and congenital form leads to more serious results as affecting the general health of the population?—Of the population, certainly.

8329. You speak of the immediate danger of this disease being extended to the second generation, and the vitality being diminished for several generations. Could you give us any evidence as to the effects after the second generation? Have you come across cases of that kind?—Yes. Without mentioning names, one knows of families in which two or three generations have been extremely able financiers, we will say; one member of that family—the heir, perhaps—has become infected with syphilis, with the spirochæte, and from that time onwards the family has shown no evidence of pre-eminent ability; from that time onwards they have remained as they were, living on the money they have had, or squandering it, in many cases taking to gambling and gaming, and have steadily gone down.

8330. Then you think the effects of syphilis may not only be physical, but moral and intellectual?—I am sure they are mental in many cases.

8331. That implies deterioration of the intellectual qualities of the family?—Exactly.

8332. You say that syphilis gives surgery a very large amount of work. Would you just indicate the cases in which surgery is concerned with syphilis?—Yes. In many cases of inflammation of the arteries. We take it now that all aneurisms are essentially syphilitic in their origin.

8333. You think all aneurisms are?—Except those definitely caused by injury; but the vast majority of aneurisms are syphilitic; the vast number of cancers of the tongue originate in syphilis. You are not safe in going so far as to say that all are; but the more we know of them and of the antecedents of these people, the more sure we are to find syphilis.

8334. Do you think we shall be led to believe that cancer and syphilis are very nearly related?—No; only in that particular instance of the tongue, where you have a definite irritating cause, because cancer, so far as we know, is due to prolonged irritation, plus some-

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thing else—plus an unknown factor. But the prolonged irritant in this case of cancer of the tongue only is syphilis.

8335. As regards tuberculosis, could you give us any evidence of the connection between syphilis and that disease?—Yes; in two ways. You see it in acquired syphilis—that people do not live the full time, they do not reach old age in many cases, and when you inquire what the cause of death was you will find it has not been actually syphilis, but it has been some tuberculous affection. Then, in the second generation, people who have shown marked signs of syphilis early in life very often die of tubercle later in life. By later in life, I mean from 25 up to 30. They have a period when they appear to be in fairly good health, and then they drop off into tubercle. That, I suppose, means again lowered vitality.

8336. That shows clearly that syphilis may produce predisposition?—Yes, predisposition, not more. There is a connection between the two. One sees it in cases over and over again. It is not in one case or two cases, and one is not sufficiently sure of it, of course, to say in every case, or even in the majority of cases. That, I suppose, means again lowered vitality.

8337. That, of course, is a very important question for this Commission. Do you think you could suggest to us any way in which we could get more information as to the relation between tuberculosis and syphilis?—Only by getting individual people's opinions, I think, and observation. The French, I think, know it very well. There have been one or two books written upon it, but it has not been thought about much in England.

8338. You think, with us, it is a very important matter?—I think it is very important indeed.

8339. And that in all this work that has been done to combat tuberculosis; it may be we are neglecting what is a large cause of the spread of tuberculosis?—Yes; I would say a cause, not a large cause; because in Ireland there is a great deal of tuberculosis and comparatively little syphilis, I take it.

8340. You tell us that the particular danger of the disease lies in the fact that the subsequent effects bear no necessary relation to the severity of the initial lesions. You mean that the effects at the time when the disease is acquired may be small?—So slight that it is passed off as nothing and not noticed; but then that bears no relation at all to the after effects, and they may suffer extremely severely.

8341. You think that the teaching of the schools should be so insistent that syphilis ought to be thought of as a causal agent in disease as readily as an Australian thinks of hydatids when he is confronted with a tumour. Do you think our teaching has gone as far as that at present—this insistence which you demand?—No; I think, if I may say so, it is only within the last few months, or the last year or two, that one is beginning to be more and more insistent that people should be increasingly on the look-out for this disease.

8342. Are you satisfied now that the teaching is going on the right lines?—It is going on the right lines, but it is quite at the beginning.

8343. And more ought to be done?—More should be done and will be done.

8344. And you think this Commission ought to urge the teaching of this question more thoroughly in our medical schools?—Yes, I think that is quite important.

8345. You say at present it is too much the custom for medical men to say: "There is no history of syphilis in this case, and there is no syphilis in this district, so that this lesion cannot be due to infection." Surely, now, with the knowledge we have at our disposal, and the tests we can provide, there is no excuse for such a verdict as that, is there?—Yes; there is an excuse, because these people are getting older, and they have not been taught any bacteriology; practitioners after 50, if they have been in practice in country places for a long time, are very very apt to take things as they come.

8346. But with the new teaching that will disappear?—That will disappear; I am looking forward to the next generation now.

8347. And the practitioners all over the country, if they could not test for themselves, would have the means of having tests carried out in public institutions, so as to make certain of their diagnoses?—Yes; but there is very often no means of doing that.

8348. At present, you mean?—At present; that is one of the things that ought to be done.

8349. Then you attach great importance to the better instruction of the medical student?—I think that is the essential beginning of these things. It must spread from him to a large extent.

8350. That must be the first step towards securing recognition of the disease?—Yes.

8351. You also advocate that each hospital should establish a genito-urinary department under the control of a senior officer. Do you mean all the hospitals throughout the country?—I think so; they would make centres in each case. I would rather have it done in that way than by special hospitals or special dispensaries.

8352. Would that cover all the cases which that department would have to deal with?—Yes. I purposely tried to widen it. I do not want to limit it to what you call here "venereal diseases." I think people are more likely to come if they think they are going to be treated for any genito-urinary disease rather than if they know they are going to be treated for a particular one.

8353. Take skin diseases, which are sometimes associated with what we call venereal diseases; would they come to that department?—No, I think that skin diseases and syphilis do not necessarily go together in any way. Skin diseases are a very much wider condition, and any eruptions they get in these particular diseases are merely part of the disease itself.

8354. Then you think that a genito-urinary department would be sufficiently wide-embracing to cover all cases that need treatment?—I think so.

8355. And the advantage, you think, would be, that people would not be frightened of going to this department, as it has not an unpleasant label?—I think not. I think that is why it should be widened in that way; that is to make it as easy as possible for these people.

8356. You think it should be chiefly an out-patient clinique, held at times which would suit the masses?—I think that is the essential, that it should be at convenient times, and that the vast majority of cases should be treated as out-patients, if they come.

8357. Probably all that would be necessary would be a few beds just to take in cases where the treatment involved stopping in bed?—Yes; for instance, after you have given an injection sometimes it is necessary to take in a patient, and there are a few acute cases that must be taken in.

8358. Then you wish to tell us that all hospitals and, I suppose, Poor Law infirmaries too, should have a department of the kind that you have referred to?—Yes. I do not know anything about the Poor Law infirmaries.

8359. Anyhow, all institutions?—It should be institutional treatment, I think.

8360. In your hospital, how do you treat patients that come to you? Do you receive all who come and present themselves?—Everybody is received and is treated as an out-patient; I do not see them unless there is some special point about them. If it is desirable they are taken in, but the early cases are hardly ever taken in; it is not once in a year.

8361. They get out-patient treatment?—They get out-patient treatment.

8362. And then go away?—And then go away as soon as the symptoms are cured.

8363. As soon as the symptoms disappear?—Yes, but that is not the cure of the disease.

8364. Certainly not. Can you suggest any means by which people can be induced or frightened into taking full treatment?—I think it is a matter of education to a large extent; the better educated people do come more readily. But the best educated people

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very often do not come, if you call the best educated people the upper classes. That is one's own experience.

8365. I suppose you know that some of the hospitals in London do not treat these cases at all; there is no provision for them?—Yes, I believe that is so.

8366. You think that ought to be enforced upon them?—I think it is desirable in the highest degree that patients should attend regularly and for a sufficient length of time.

8367. Then these separate departments you propose to create, you say should be thoroughly equipped with a sufficient staff of pathologists and with the necessary remedies. Would you make each of those departments in every separate hospital sufficiently equipped to make all the Wassermann and microscopic tests, or would you rather do that in central laboratories?—If you have it sent to a central laboratory it entails delay. It has to be sent up there, and they may get overcrowded with work. It depends upon how large a staff you have at the central laboratory, I take it.

8368. But from the point of view of economy, do you think it would be better to have comparatively few laboratories where all this testing work could be done, and let these departments attached to the hospitals merely send their specimens to the central laboratory?—The advantage of that would be, you would always have the same people doing the same tests.

8369. And they get to be experts?—They get to be experts; to a certain extent that is so. It is not a test as a test, but it depends on the individual case. You would like to be able to compare that with the previous time you saw the same patient, so that the same patient should go to the same pathologist each time, and that would be a little bit against having a central laboratory.

8370. Then your view is that the expense of these new separate departments should be borne by the State?—I am afraid so.

8371. You could not expect the hospitals to do them with their present resources?—I do not think they have any resources with which to do it.

8372. You consider the State would be not only justified, but would be actually repaid?—The State would be more than repaid.

8373. By the public health that would be saved?—Yes, very materially in regard to both diseases.

8374. You say you are not in favour of notification, at any rate for the present. By that you mean, I suppose, the notification of the disease at the time it is discovered to the health authority?—Yes, I do not think that is practicable. You see that the wives, respectable women who are married and in a good position, would never be certified, and we should be very loth to certify a very small child as suffering from syphilis; it would brand it all through its life.

8375. You do not think the notification could be made practically confidential?—I do not think you could; it could be done in a large town, but you cannot do it in a village. I think it would leak out almost directly.

8376. It would be merely a confidential notification from the medical officer who detected the disease to the health authority that he had discovered the disease; you think that would not work?—Theoretically yes; practically I do not think it would work. I think it would become a dead letter everywhere in a very short time.

8377. I suppose you think that notification, standing by itself, would be of no value unless there were means of insisting on, or almost insisting upon, the treatment being carried through?—No, not the least; it would be a mere figure and nothing else otherwise. The object of notification would be that you should have thorough treatment.

8378. The whole point is to secure early discovery and in some way or other, at present undefined, to get the patient to go through the correct form of treatment?—Yes; and the difficult cases are not these cases at all; it is the cases of the women and children which are more difficult.

8379. You hope when these new departments, with a pleasant title or comparatively pleasant title, are set up, that then the public would learn to appreciate their advantage and be less ashamed of going to them?—

I think so, but it will take a generation or two; it will not be in our time probably.

8380. In your private practice, have you come to the conclusion that there is any increase of prevalence either of gonorrhœa or syphilis?—I think it is very difficult to say, because the older you get the more of these people you see. I think they come to you because you are older; they do not go to very young men.

8381. But you do find, as other witnesses have told us, that the disease does not assume the very acute forms it used to do; at all events so open?—I would not be too sure about that. That, again, depends. Each individual differs.

8382. Do you yourself come across very bad cases, very virulent cases, now?—Yes; within the last three or four months I have seen three or four cases of very virulent syphilis, what one used to call malignant syphilis.

8383. At what stage?—The late secondary; say within about six or seven months after infection, untreated.

8384. Is it your impression that there is much of this disease among the upper classes and the upper middle classes?—Yes, I think they are more careless about it than other people; a good deal more careless.

8385. More careless?—Yes, they think nothing of it.

8386. Is not there more knowledge among them than among the working classes? Would not that have the effect of making them afraid of the consequences, if they did not go for treatment at once?—No, they are curiously careless; they think nothing of it. I mean, it does not appear to carry very much stigma with it, and that is the unsatisfactory part of it. I think a great deal more can be done in the way of education in that way.

8387. And you think that among those classes among whom your practice lies there is a great deal of prevalence?—Yes, I should say there is a considerable amount.

8388. Do you come across many cases of congenital syphilis in the institutions you attend?—Yes, as one gets older. Again, the interesting part is, you see the results in the next generation, the second generation, and they are very interesting.

8389. You see the results which you yourself anticipated?—Yes.

8390. I suppose you have not any family histories that you have kept which the Commission could see, without names, of course?—It is a very difficult thing. People are able to put names to very impersonal narratives, are they not?

8391. One of our great difficulties is to find out the prevalence of the disease, especially, perhaps, among what are called the upper classes. Can you suggest any way in which we could get any figures which might give us some fairly accurate idea?—I do not know. I do not think one can very well; it is an extremely delicate matter.

8392. Do you come across cases which have been treated by quacks and irregular practitioners?—Yes, I suppose most people have been once or twice at any rate to some quack.

8393. You think it is a general rule to go first to a quack?—Yes, it is a common rule at any rate.

8394. Can you suggest any way by which this quack treatment, which in our present state of knowledge seems to be exceedingly dangerous, can be checked?—No, I do not know of any way; it is not worth while putting the law in motion against them. I suppose they are hunted up by the police every now and again.

8395. Do you think quackery of that kind is increasing?—No, I do not think materially.

8396. But you think it is very prevalent?—Yes, I think it is prevalent.

8397. And that the so-called upper classes resort to quacks quite as readily as the working classes?—I think quite. They would not go to hospitals, you see.

8398. (Sir David Brynmor Jones.) I am not quite certain whether I understood you to say that gonorrhœa was a curable disease?—Yes, curable if it is taken in time and thoroughly treated.

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8399. Is any disease curable?—Yes, I think shingles are curable.

8400. Are you, then, certain that the organism, after suffering from shingles, and apparently recovering normal health, has not really received some damage of a more permanent character?—I am not sure.

8401. You answered without hesitation?—Yes, I am as sure about it as I am of anything.

8402. That leads me to ask, what do you mean by the cure of a disease?—Its leaving no after-effects, and the tissues, as far as one knows, being in the same condition.

8403. A moment ago you told me you were not sure even in the case of shingles that there might not be some after-effect, although apparently the disease, or the symptoms of the disease, had passed away?—Yes.

8404. Then it is not a certain matter that gonorrhoea is curable?—It is not certain because it is an infective organism; it is a micro-organism, and you do not know what the effects of a micro-organism are indefinitely.

8405. Then you are exactly answering my question in the negative?—Yes.

8406. You are not absolutely certain that any disease is curable?—But what is the good of going into detail like that; it is the broad fact you want; it is as curable as curable things always are.

8407. Yes, but error lurks in generalities?—Yes, of course it does.

8408. I have put that point to you, and I take your answer for the moment. You said that a vaccine treatment for gonorrhoea has been discovered?—I said it was being used.

8409. It cannot be used without being discovered, can it?—Very likely; possibly not.

8410. Then there is a vaccine treatment in use for gonorrhoea?—There is.

8411. I suppose, when you talk of a vaccine treatment, you mean a treatment analogous to that which is compulsory, with some exceptions, in vaccination against small-pox?—I suppose so.

8412. Then am I right in thinking that it is possible, if this vaccine treatment should, by experience, be found to be efficacious, that every young man and every young woman might be vaccinated against gonorrhoea, if I may use the term?—No, I should not think of it.

8413. That is not quite an answer to my question. You admitted to me, I think, that a vaccine treatment for gonorrhoea was analogous to the vaccine treatment which is compulsory, with certain exceptions, against small-pox?—I am not a vaccine specialist; I do not know anything about it except as regards treatment; I am a surgeon.

8414. (Chairman.) But it is a treatment, not a prophylactic like that used for the plague?—No, not prophylactic; I do not know anything about it.

8415. (Sir David Brynmor Jones.) Then we may take it you do not make the suggestion that by any known method of treatment at the present time it is possible to make people immune against gonorrhoea?—I do not know; that does not come into my argument at all.

8416. You added a new fact, as far as I know, to the biography of Oliver Goldsmith?—Yes.

8417. And I understand that the Historical Society has discovered that he must have been suffering from gonorrhoea sometime in his life?—Probably.

8418. Will you just explain to me by what method of reasoning you arrived at that result?—Yes; that he had had an old disease of his bladder which started probably from some infection, and that the inflammation of his bladder ran up his ureters, and he died of a special form of kidney disease which is associated with very chronic inflammation. It was an instance of far-reaching effects, and I thought I might mention him as not betraying any confidences.

8419. I think you are quite safe in that; but may I suggest in the case of that illustrious poet there may have been contributory causes?—It may have been his early life was not very satisfactory.

8420. An unsatisfactory early life. May starvation in early life, for instance, have been a contributory cause?—No, I do not think so. He joined the Club afterwards; he had many good dinners.

8421. May excess of eating and drinking in moments of temporary affluence have been a contributory cause?—No, it would not give rise to cystitis, I think.

8422. Then the probability that in those days in his early life he may have been irregular in his conduct, is really the only basis for your interesting generalisation?—No, not at all. The after effects were the after effects of ordinary gonococcal infection.

8423. (Sir Kenelm Digby.) You say the upper classes are very careless in this matter about the effects of gonorrhoea?—Yes, I think they are unduly careless.

8424. Do you find that they do not really appreciate the possible consequences of it?—I do not think so. I think it is chiefly ignorance.

8425. Take the ordinary young man about town, I suppose he is not really deterred at all from running into danger?—Not in the least.

8426. Then you say syphilis is a danger to the race. Does not that point to some greater precautions than we have at present against the marriage of syphilitic persons?—Yes, I think that is very important on both sides, both the man and the woman.

8427. Have you any suggestion at all to make as to that, or would you trust entirely to the spread of education and the increase of knowledge?—Yes, I think the lady should be interested there. The mother of any girl should at any rate know that it is a very serious thing to marry a person who is diseased, or has reason to think he is.

8428. Do you think anything can be done? There is a suggestion that has been made with regard to putting certain restrictions on marriage, certainly by better information, if not in some cases by actually changing the law?—If you could bring it to any practical outcome, but I doubt very much if you would.

8429. Apart from any question of law, what would really be a safeguard against the marriage of a syphilitic person? A man who has contracted the disease and has apparently recovered and has had no symptoms, in the ordinary case, I suppose, thinks he is perfectly safe in marrying?—Any decent man would have some test done to ascertain whether he was free from the disease.

8430. That would be one way. For instance, supposing a man had the disease possibly—I do not quote it as a practical suggestion, but merely as a possible suggestion—supposing he had once contracted the disease, has he any right to marry till he has such reasonable certainty as can be obtained with present knowledge, that he is free from the disease?—No, he has no right to, but, on the other hand, you cannot compel him. The compelling force should come, I think, from the bride's side.

8431. From the parents of the bride?—From the parents of the bride; and they appear to me to be only too anxious very often to get their daughter married.

8432. It may come if people know more about it?—I suppose it may come if people know more; again it is a matter of education to a large extent.

8433. Supposing you could introduce some change in the law such as I am just putting, as, for instance, a man who had once contracted the disease should not marry until he is certified to be free from the disease, or something of that kind; would you consider it at all practicable?—It would be desirable; but I do not think, again, you would ever make it a practicable thing. I very much doubt whether people think of their health when they are going to marry.

8434. Of course, as you are aware, the Divorce Commission recommended the communication of venereal disease should be a ground for judicial separation?—If that had been acted upon, I suppose in course of time it would re-act on the marriage of these people.

8435. Of course, there would be a great many cases which would not be heard of, no doubt; but

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still there would be cases where it would likely be of use?—Yes, I think you would get help in that way.

8436. Would you go a little further than that? Would you make it a case for incapacity to marry?—No, I do not think so, because there are a very large number of people who have these diseases and who afterwards have no apparent ill-results.

8437. I am not putting it that a man who has once had the disease should never marry; I am putting it that a man who has had the disease should not marry until he has such reasonable assurance as can be got in the present state of knowledge, that he can marry safely?—Yes, that would be a very desirable thing; but I do not know how you are to compel that.

8438. Do you think that is altogether impracticable?—I think it is very difficult. I do not quite know how you are going to do it.

8439. I quite agree with you?—It is most desirable if it could be done.

8440. I think we will leave it then. It is a very real and serious danger to the public and to the State, as you put it?—It is a very serious danger.

8441. You think if it can be in any way checked or restrained, it is most desirable to do so?—Most desirable in every way; and you will have a healthier old age, too.

8442. You do not think the matter could be at all connected with notification of the disease in the ordinary sense, to keep some record of a man having had the disease?—It is not only the man, it is the woman; and there are so many people, both men and women, who absolutely have no knowledge of having had it, and, therefore, your records would not be very useful or very full.

8443. An only objection which has been urged with much force as to any form of notification, is that any form of notification would rather check the early recourse to a properly qualified medical man?—Yes, I think it would do that very well.

8444. You think it would have that effect?—Yes, I think it would.

(*Sir Kenelm Digby.*) That is one very serious objection to it.

8445. (*Sir Almeric FitzRoy.*) Have you heard anything of the discovery of a new cure for gonorrhœa owing to some work done by the Pasteur Institute at Tunis, which was reported to the French Academy of Medicine by M. Laveeran the other day?—No, I have not seen it.

8446. It is claimed for it that it provides as effective a means of curing gonorrhœa as Ehrlich has done for syphilis?—It wants proof, does it not?

8447. It was vouched for by Mons. Laveeran?—We should be very glad to try it if we hear of it.

8448. Are you satisfied as to the effect of salvarsan as a remedy?—Yes, quite—*neo-salvarsan*.

8449. Have you seen Dr. Mentberger's book on the arsenical treatment of syphilis, a review of which was published in one of the medical journals last week; I really forget whether it was "The Lancet" or "The British Medical Journal"?—No.

8450. The review of the book, which I hold in my hand, is rather a destructive criticism of the value of salvarsan, so far as I understand it. You have not seen it?—What age is he?

8451. It was last week?—What age is the man who was writing it?

8452. I do not know what age the man is who writes it. It is a review of a book published by editorial authority. They give it very great prominence. I will ask you one or two questions about his conclusions. It is explained here that one of the author's conclusions is that although salvarsan is a useful addition to the therapeutics of syphilis, it cannot replace mercury and the iodides. Would you agree to that?—Yes, I have taught that from the beginning.

8453. And he holds that abortion of syphilis cannot be proved till cases have been observed for at least ten years. Would you agree to that?—Yes, I supported that originally.

8454. Finally, his advice to the patients, or at least the advice he thinks should always be given,

is that salvarsan, even after numerous injections, does not cure syphilis, and that prolonged intermittent mercurial treatment is absolutely necessary afterwards?—Those are my own conclusions; apparently he has copied them.

8455. I assume you will pay him the reciprocal compli of agreement?—I put them all before the Royall Society of Medicine two years ago; those three points.

8456. (*Sir David Brynmor Jones.*) You have withdrawn from your position?—The original question was whether I thought salvarsan valuable.

8457. (*Sir Almeric FitzRoy.*) No, effective?—Yes, very effective; most effective.

8458. But do you think it has superseded every previous treatment, then?—No; you must use mercury; you must blend it with other things; you must use mercury as well. It is an excellent thing for shortening the process.

8459. I think we have had something more claimed for salvarsan from that chair before this?—No. I do not hold with salvarsan as a treatment by itself; I do not believe there is much in it.

8460. You do not?—It shortens things very much indeed; it is very useful and very effective in that sense.

8461. (*Chairman.*) The military treatment we have been told of here involves also the use of mercury?—Yes, I believe that is so.

8462. They attach great importance to that?—Yes.

8463. In neither the military nor the naval hospitals have they given up the use of mercury?—No, I do not believe anybody has.

8464. (*Sir Malcolm Morris.*) You say that gonorrhœa is a more serious disease for the individual than syphilis for the race. What are the number of forms of sequelæ in gonorrhœa?—In the male?

8465. Yes, in the male?—I think chiefly kidney and joint diseases.

8466. Do you think that it is comparable at all to the number of sequelæ of syphilis in the male?—No; but in syphilis it is curable to a very considerable extent; but in gonorrhœa, when they have once got advanced symptoms, I do not think they succeed or that it is so curable.

8467. How about the number of cases of syphilis that are not treated in the country? Would not the sequelæ in those cases be as severe and serious to the individual as gonorrhœa?—Do you think there are a very large number untreated in country places? They do not exist.

8468. I am not talking about country places, but in the world at large?—I do not know.

8469. Would you adhere, then, to the statement that gonorrhœa is a more serious disease to the individual than syphilis?—Yes, I think the symptoms afterwards lead into a much more unpleasant old age, a worrying old age; whereas in syphilis they get cured to a very considerable extent.

8470. But how about the cases that are not treated?—Which?

8471. Of syphilis. You say it can be cured; that means when treated. Supposing they are not treated?—If they have syphilis, even the late and remote sequelæ and complications are to a large extent curable, whereas in gonorrhœa I do not think they are curable.

8472. Do you think the sequelæ of gonorrhœa, the kidney diseases and the strictures of old age and the discomfort of old age, are comparable at all to general paralysis and the various sequelæ of syphilis?—That is not on the surgical side; that is the medical side.

8473. Yes; but those are sequelæ of the disease all the same. It has nothing to do with medicine or surgery?—I am talking merely as I see them.

8474. (*Dr. Arthur Newsholme.*) Would you mind my asking if that statement was limited to the surgical side?—Yes, I am limiting it entirely to the surgical side.

8475. (*Sir Malcolm Morris.*) What is the most recent treatment of gonorrhœa?—Acute?

8476. Yes?—In the way of irrigations?

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8477. Yes?—Partly irrigations and I suppose partly vaccines and partly the silver salts.

8478. Is it to be solely a question of taking drugs internally, or is it by injections?—Locally as well.

8479. Locally as well?—Yes.

8480. Could this local treatment be carried out in this out-patient department department you propose?—Surely.

8481. It would be rather a large and complicated affair, would not it? Would the actual treatment be carried out there, or would it be left to the patient to carry out at home?—I think the irrigations should be carried out in the place.

8482. In the out-patient department?—Yes.

8483. How many cases have you seen the vaccine treatment of gonorrhœa carried out in, roughly?—In all our recent cases that are admitted to the wards we give vaccine habitually, and I think generally two or three are generally to be found in my wards.

8484. You have generally two or three gonorrhœa cases in your wards at St. Bartholomew's?—As joints we take them in, not as gonorrhœa.

8485. They are not treated for gonorrhœa *qua* gonorrhœa, but treated for gonorrhœal rheumatism, so-called?—Yes.

8486. Is the result satisfactory?—The house surgeon is very satisfied with it, but not in every case. You cannot say beforehand.

8487. It is not a routine treatment that you could recommend in a large way, is it?—No; I think you can try it, and you cannot say beforehand which cases are going to succeed and which are not.

8488. But some are benefitted by vaccine?—Yes.

8489. What sort of vaccine? Is there any one special kind?—No; it is an auto-vaccine. It is from the patient himself.

8490. It is an autogenous vaccine?—Yes.

8491. Are there any statistics as to the proportion of joint cases following gonorrhœa?—I daresay there are, and we could get them out.

8492. Does it amount to a very large number in a very large hospital?—In my own wards are 70 beds; and usually there are a couple of cases.

8493. There are a couple of cases of gonorrhœal rheumatism?—Gonococcal infection; you must not call it gonorrhœa.

8494. (*Chairman.*) There are other methods of treatment for it besides vaccine?—Yes; hot air, and all kinds of things.

8495. (*Sir Malcolm Morris.*) Is there any other method of treatment which can be recommended?—In that particular case, I take it, it is one of the sets of cases you would have to take in; you could not treat that as an out-patient.

8496. You recommend that there should be a special out-patient department, which is to be known as the genito-urinary department, for the treatment of both gonorrhœa and syphilis?—I think so.

8497. How would the cases of infantile syphilis be included under a genito-urinary department?—I suppose they would be sent there from other departments.

8498. You would arrange throughout the whole hospital that all such cases should be sent?—I think so.

8499. With an accidental infection of syphilis on other parts of the body it is not a genito-urinary disease?—No, it is not.

8500. But you would have them sent to this particular department?—Yes.

8501. And the same thing would apply if they came with a secondary skin eruption?—I think so.

8502. They would be sent from the skin department to this particular department, where the treatment would be carried out?—Yes.

8503. So that you would recommend the scheme they have adopted in the Army, to be carried out in this out-patient department?—Which is that?

8504. The scheme adopted in the Army which was printed, for so many salvarsan injections and so many mercurial injections?—Yes; if that is found the best way, and it appears to be. You must have a routine

of some kind, and that appears to me to be the best routine at the present time.

8505. You would recommend that in regard to the out-patient department in the hospital, especially in the country, as a routine for syphilis?—I would not lay down the routine.

8506. You would not?—I do not think so; I think you had better let each department settle for itself. You would never get any further if you did.

8507. You think that ought to be done according to the views of the man in charge of the department, and not according to any particular scheme which is considered to be the best?—I do not think so, because what is best here is not best there.

8508. Would you advocate the same in the Army?—Yes, I suppose they are very constantly changing as a matter of fact.

8509. As a matter of fact, they have a printed scheme which is sent to every department of the Army throughout the whole of the British dominions, and is carried out on the same lines in each place?—But has it not changed materially in the last two years.

8510. Yes, it has only recently been done?—Exactly. I think in a civil population you must leave that to the individual. You have no control over them.

8511. (*Mr. Lane.*) You would not give the Commission to understand that it has ever been taught that gonorrhœa was a local and curable disease in any book on surgery?—No; I think I was taught that as a student.

8512. I do not know what book it was; I think we were students about the same time?—I think my teachers told me so; at least that is what I gathered from them at any rate.

8513. But all students in your time were made aware of the many possible complications of gonorrhœa?—Yes, they were told there was stricture, but not much more than that.

8514. And arthritis, epididymitis, and cystitis?—Yes.

8515. Talking about the vaccine treatment in gonorrhœa, you were asked if it was satisfactory, and your answer was a little guarded. You said your house surgeon was very satisfied?—Yes.

8516. Were you?—Yes, to a certain extent; they say they are cured; they go out from the hospital more rapidly than they used to do when they did not have vaccine treatment.

8517. You do not show much enthusiasm over that?—For the reason that I am not able to distinguish which of the cases it benefits and which of the cases are not benefitted; in some cases apparently they get material benefit and in other cases they do not.

8518. You have seen cases of gonorrhœa that you might describe as incurable?—Yes.

8519. Especially cases of gonorrhœal arthritis. What treatment do you recommend in those cases? Do you rely on vaccination?—No.

8520. I see you say that local treatment is not carried out; but in cases of gonorrhœal arthritis there is nearly always some focus of gonococci in the system that can be got rid of by treatment?—Yes, an attempt is made to get rid of that.

8521. We are quite accustomed to consider all methods of treatment?—Usually irrigation or injections.

8522. But in most of those cases of gonorrhœal arthritis there is a focus of infection in some remote part of the genital organs, such as the prostate or the seminal vesicles. Is that treatment carried out with massage of the prostate?—Yes.

8523. It is a most valuable treatment?—Certainly.

8524. Do you think that gonorrhœa is responsible for any mortality directly?—Yes; but I do not think to any extent. I very rarely get a patient who dies from gonorrhœa, but I believe that some pelvic inflammations in women lead to death.

8525. Indirectly, then, there must be a considerable mortality of which we get no idea from records?—Yes. I take it the difficulty is you have a mixed infection there; you are not able to say definitely it is all gonococcal.

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8526. When you were dealing with the dangers of syphilis, you were expressing your opinion that gonorrhoea was nearly as serious a disease as syphilis. You might have inferred that syphilis is much more amenable to treatment?—Yes.

8527. And very seldom is it that syphilis does not respond to treatment?—Very seldom.

8528. And very frequently you must have met other cases of gonorrhoea that were absolutely obstinate, and even incurable?—Yes.

8529. You have no beds at St. Bartholomew's set apart for that purpose?—No.

8530. And there is no special teaching on the subject?—There is no special teaching on the subject. I think we should be the better for it.

8531. You are aware there are departments in one, if not two hospitals?—Yes.

8532. Guy's and the London?—Yes.

8533. You are speaking here of the particular danger of disease from the fact that subsequent events bear no necessary relation to the severity of the initial lesion—meaning that you have seen very severe after-effects follow after a very insignificant primary sore?—Where the primary sore has not been recognised or known to exist.

8534. So that the severity of the late symptoms is quite out of proportion to the initial lesion?—Entirely.

8535. Is it not, or may it not be due to the fact that the initial lesion is so slight that the patient neglects treatment, and very possibly the surgeon does not insist on the drastic treatment he should?—Yes, I think very likely.

8536. You advocate an out-patient clinique, preferably in the afternoon. Would the working men be able to get there in the afternoon?—I was thinking, of course, specially of our city population, which leaves between four and seven. It is inconvenient to these people to come back at eight or nine in the evening, whereas they could quite well stop on their way and go by a later train.

8537. I was rather surprised at your saying that the upper classes mostly resorted to quacks. What sort of quacks do you mean?—I mean that they generally have been to one of these people who have a little open surgery or something of that kind.

8538. They usually have some qualification—chemists or something else?—Yes.

8539. They go to advertising chemists?—Yes, and people who advertise secret remedies.

8540. You were asked something about arsenic in syphilis, *apropos* of some article that is written in condemnation of arsenic. I think you have elsewhere expressed the opinion that those who write in the most infuriated way against salvarsan are those who have never tried it?—I think so.

8541. I quite agree with you. You were asked something about certificates of health. Do you know anything about certificates that are required in one state of America, Wisconsin?—No.

8542. "That any male person applying for a licence to marry shall produce a certificate setting forth that person is free from venereal diseases so nearly as can be determined by physical examination by the application of recognised clinical and laboratory tests and scientific research. Such certificate shall be made by licensed officers and shall be filed with the application to marry and shall read as follows: "Would you be in favour of some measure of that sort being taken?—I would rather have it done by education, if you could do it. It is very desirable, but I do not think it would work.

8543. (*Mrs. Creighton.*) Then may we take it that in this sentence of yours when you say gonorrhoea is a more serious disease for the individual, and syphilis for the race, you mean as far as surgery is concerned?—As far as surgery is concerned. I am talking only of surgery. I know nothing about the medical side.

8544. Then would you be so kind as to explain to me with regard to the far-reaching results of gonorrhoea; you say that a man has suffered from stricture at 60 after an infection at 18, how you have determined that that stricture at 60 is the result of the infection at 18?—I only know of one or two other causes; and if it is not

due to the other causes, I should assume it to be due to that.

8545. It is really an assumption; it is not because of anything you have found out? There is no bacteriological investigation that proves it?—I do not think there is; it is a different process altogether. It would not depend on bacteriology.

8546. It could not be demonstrated by that?—No.

8547. So that it is simply because you know that disease can only be caused in one of two ways, and in this case it is not caused in the other way?—It is not caused in the other way.

8548. Again, would that be the same thing as regards cancer of the tongue; do you form your conclusion in the same way there?—No, because there you have evidence of previous syphilitic trouble going on. You perhaps had chronic inflammation going on for a long time, which eventually becomes cancerous, and you can watch the process.

8549. Again, with aneurism, is it the same thing; that you have watched the progress?—That is inside; it is in the arteries.

8550. I know, but you have had symptoms of the process?—Yes.

8551. As regards your treatment in the out-patients' department, you give salvarsan injections there, do you not?—Yes.

8552. And is the patient then allowed to go away home?—Yes.

8553. Immediately afterwards?—Yes; we used to keep them in, but now we send them home. There is no need to keep them in.

8554. At the Military Hospital I gather they keep them in bed for a day or so?—Yes; but we find that is unnecessary.

8555. And you have had no evil results?—None at all.

8556. From sending them away at once?—Absolutely none.

8557. And you have had a large number of cases?—We have had 800 or 1,000 in the last 12 months.

8558. And have not had one evil result?—Not as far as I know.

8559. The vaccines of which you have spoken are still in a very experimental stage, are they not?—I think so.

8560. About how many years have you tried them?—When did Sir Almroth Wright begin?

(*Mr. Lane.*) About six years ago.

8561. (*Mrs. Creighton.*) Not longer than that?—Within the last ten years, we will say.

8562. Do you find if you warn the person of the serious results of his marrying until he is cured, he is, as a rule, ready to listen to you?—Sometimes, but by no means always. You can tell a person point blank what will happen if he marries, and he will go and marry the next day.

8563. Does that apply to men belonging to all social classes?—Yes, I have two in my mind now, one a poorish man down in Whitechapel, and another in a good position.

8564. You warned them both?—I warned them both.

8565. And they married?—They married within a fortnight.

8566. Do you know whether prostitutes come for treatment to your out-patient department?—No, I knew nothing about the prostitute side of it.

8567. It seems to me in all these talks about early treatment, unless you get at the women you will do very little towards stamping out the disease?—You must get both; you must get both men and women equally. It is the disease and not the individuals.

8568. But if you say the women do not come?—I dare say they do; I do not see them, that is all. They are not in my branch of the work.

8569. You do not see the women at all?—No, not unless there is something quite unusual about them.

8570. So that you cannot give me any information as to how far women come to your hospital for treatment?—No.

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8571. (*Mrs. Scharlieb.*) With regard to education, do you not think the whole of the community wants educating?—I do.

8572. How would you set to work?—As you are doing now, I think, by allowing people to speak about it, and to think about it. As soon as they get to know, then a great deal of this ignorance will be dissipated.

8573. With the present movement, both with regard to this Commission and with regard to a great many other things which have been before our profession lately, do you not think that will filter through?—Yes; that is a move in the right direction; it is the beginning of a very great improvement.

8574. And you would advocate probably the instruction of adolescents?—Yes, if it can be done, but not in any very public way.

8575. A careful father to the son, and a mother to the daughter?—Yes; and they ought to, I think.

8576. And, failing them, probably a doctor, or a schoolmaster?—Yes; it can be done without undue publicity, or without undue trouble.

8577. Then with regard to public bodies, are they not perhaps great offenders in that respect, inasmuch as they do not in many instances provide suitable treatment and suitable accommodation in infirmaries, and in some of the hospitals?—Yes. I think the hospital work at any rate might be directly improved. I do not know anything about the public infirmaries.

8578. Do you not think that probably if we could make people understand that what you said a minute ago is the fact, that the disease is to be treated and not the individual blamed?—Yes, I think that is a very important point. You should get rid of the moral side of it if you can, and make it a disease, and not a moral fault.

8579. Then with regard to the practitioners, is it possible to get those who were educated, perhaps we might say 25 years ago, and have since then been in country districts, and have had no opportunities, to accept some post-graduate work?—No, because of the loss of money it entails to get away very often; they would lose money.

8580. So that we shall have to wait until the new generation gets to work?—I am afraid so.

8581. (*Dr. Mott.*) I think you said you thought there was not much change in the character of syphilis at the present time from when you were a student?—No; as far as I have seen I think not, on the whole.

8582. Do not you think the bone and skin diseases were more severe? That is my impression?—Yes, but we have had some very bad ones lately; quite as bad as we ever saw.

8583. Of course it is generally thought there is a change in the type of the late manifestations of syphilis now?—Yes, but every now and then you come across them.

8584. Yes, you do?—I think that is partly explained in another way; they are better fed and there is better hygiene.

8585. Do not you think many of those conditions we saw as students were due to secondary infections with other organisms, too?—Yes, that is what I mean by better hygiene.

8586. There is much less of that now?—Yes.

8587. One never sees rupia now?—Yes, I have seen a case not long ago.

8588. But it is rare?—Yes, it is rare.

8589. Or comparatively rare. If you do not think the type has changed, I need not ask you why it has, but I think it has?—The type has not changed; but the people are better fitted to fight it, because they are better fed.

8590. You do not agree with the inference that syphilis may be aborted if intensive treatment is adopted?—I do not know enough about it.

8591. Taking the 80 cases that were treated at the time of the primary sore, before a Wassermann reaction was obtainable, if for two years afterwards no Wassermann reaction was obtained, do you think one might say that those people were cured?—Yes; I should say they are well on the way to cure, at any rate.

8592. You would not think they were cured?—I would not say that.

8593. Would not you say they were cured if a certain number of them were re-infected?—Yes, then I should say they were cured.

8594. Is it not a fact that a considerable number of cases of re-infection have been reported recently?—Yes, certainly.

8595. And the reinfection has taken place in a part of the penis where the previous sore was not present?—Yes, then I should say those cases have been cured.

8596. A number have been reported in Germany in the German Navy, and a number reported in England; so it is very hopeful, is it not?—Very hopeful.

8597. Therefore you would lay very great stress upon the diagnosis of the disease in the primary stage?—The greatest stress.

8598. Before a Wassermann reaction was obtainable?—Yes.

8599. Do you regard it as probable that the Wassermann reaction, when it occurs, indicates that the organism has become generalised in the system?—Yes. I suppose that the presence of the tests shows that it ought to have been treated before.

8600. When the roseolar rash comes out, it means the sowing of organisms in the skin?—Yes.

8601. And the sowing of organisms may also take place in the internal organs, and in the membranes of the brain?—Certainly.

8602. And remain latent there for any length of time?—Apparently.

8603. Then when you get lower vital resistance—that is your position, I think?—Yes.

8604. —the organisms may become active?—Yes.

8605. For example, a blow on the clavicle may produce a gumma, or a blow on the head might lead to gumma of the brain?—Yes.

8606. And any cause which led to a lowering of the vitality of the body might lead to the active development of the organisms again?—Yes.

8607. So that it is of paramount importance really to get people to come for treatment when the sore occurs?—At the very earliest possible moment.

8608. I take it your opinion is that many of the really serious cases have been due to the fact that the syphilitic sore has been diagnosed as a soft sore and not been treated early enough?—Until it has become generalised.

8609. Yes. I must take you a little bit over to my own side. It is reckoned that 5 per cent. of the cases of people who suffer from syphilis, and suffer with tabes or general paralysis, are due to the fact that the generalisation has taken place before the treatment has been commenced, very often?—Yes.

8610. So that they may have two or three years of mercury after the generalisation, and yet the disease cannot be eradicated?—Yes, with no result.

8611. You would admit, I suppose, that if when this roseolar rash occurred a lumbar puncture were done, and you found lymphocytes in the fluid in considerable numbers, that that would be evidence of the infection of the nervous system?—No. As soon as you find evidence of spirochaetes—

8612. Not spirochaetes but lymphocytes; it is an indication, is it not?—Yes.

8613. So that altogether, that really is the most important point to be emphasised—the treatment in the primary stage?—Treatment at the very earliest possible moment.

8614. Then do not you think something ought to be done to prevent unqualified people, quacks, herbalists, and chemists, pretending to diagnose this disease?—Yes; I should have thought the law was strong enough if it was put in force.

8615. Do not you think it ought to be put into force for the sake of the individual and the race?—Certainly, I think so.

8616. I would like to ask this question. You have had the Wassermann reaction done a considerable number of times for the purposes of diagnosis?—Yes, constantly.

8617. And you lay great stress upon it?—I do.

8618. Supposing a man came to you and said "Can I marry?" and you found he had a positive

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Wassermann reaction, would you give him permission to marry?—No.

8619. No matter how long after the infection?—Yes, because I look upon the Wassermann as being evidence of infection.

8620. But there are thousands of people walking about who have healthy families who might have a positive Wassermann reaction?—That is just a typical point. But our own point of view ought to be that so long as he has a positive Wassermann reaction, so long has he evidence of syphilis, and, therefore, he ought not to marry.

8621. But supposing you gave him treatment and the Wassermann reaction disappeared and then six months after you had given him permission to marry it reappeared?—You ought not to give him permission to marry in that six months. You ought to say "Come again in a year."

8622. A year?—Yes, if the Wassermann is still negative.

8623. You have no proof that it would not come back; I have known it come back?—Still, you have done all you can at present.

8624. That is so. Still, do not you think, after all, the most important thing is the time after infection, because, you see, previous to our knowledge of the Wassermann reaction we had a pretty good guide by the time?—Yes.

8625. I mean if a man five years after infection wished to marry?—Yes, you generally said he might if he had no symptoms previously; but then your Wassermann gives you extra help.

8626. It does. I meant that. If the Wassermann reaction is so important to you, then do not you think it is very important to have this reaction standardised?—If it can be.

8627. There are so many Wassermann reactions with different methods sometimes getting different results?—That is why I think it ought always to be done by the same pathologist.

8628. But the same pathologist use a method which would not be accepted by Professor Wassermann himself?—True.

8629. This is a very important question. Do not you think that some measures should be taken to see what Professor Wassermann would accept as a reliable method?—Yes. I suppose the whole thing at the present time is in process of change.

8630. No, I do not think so myself. I think there are certain methods that can be relied upon. Of course, the great point is that there should be a positive and a negative control in every case when the reaction is done, and then the question of the number of dilutions?—Yes, certainly.

8631. That is of very great importance to you, is it not?—Yes.

8632. I mean if you see that there is a diminution of reaction, or only a partial reaction, you have evidence of the efficacy of your treatment?—Yes, quite so. I think if it could be standardised it would be a very desirable thing.

8633. You referred to the effects on the brain in the second and even the third generation?—I was thinking of individual cases I have seen where I have been able to follow them out.

8634. Then you think there is a transmission of an acquired character?—No.

8635. How do you account for it then?—I think it means general diminution of vital power.

8636. Devitalization?—Devitalization.

8637. I quite agree with you. I have seen, and I daresay you have yourself, cases of infantilism in the offspring?—Yes.

8638. And cases of stunted growth and also feeble-mindedness?—Yes, many instances.

8639. You have had considerable experience at the Victoria Hospital for Children?—Yes.

8640. What do you understand by the term scrofula?—A predisposition to tubercle, I suppose.

8641. Do not you think that congenital syphilitics are specially prone to that?—Yes, predisposed in that way. They are scrofulous in that sense.

8642. It is a popular term for it, is it not?—Exactly.

8643. Then do you think that syphilis has any relation to rickets at all?—Only in the same broad sense.

8644. Only in the same way as a devitalizing agent?—Yes, if you mean by rickets, rachitis.

8645. But you may have nodes or bosses from congenital syphilis?—Yes.

8646. With regard to syphilis, you lay very great stress upon the virus which is in the body the whole of a man's life practically, in the majority of cases devitalizing the tissues?—Yes, and his offspring.

8647. I suppose you would think, as it is the principal, if not perhaps the sole cause of aneurism, apart from injury, that it is a very effective agent in the production of arterial sclerosis?—Very considerable.

8648. And if it produces arterial sclerosis it will produce degeneration of the kidneys, heart, and the great vessels?—Yes, remotely, I suppose.

8649. (Canon Horsley.) Can you tell us what proportion of the out-patients from St. Bartholomew's are suffering from venereal diseases?—No, I cannot.

(Canon Horsley.) Is that a question we have sent to the hospitals, my Lord?

(Chairman.) Yes; we shall get all that.

8650. (Canon Horsley.) I want to be quite clear about curability. You say in your précis that it is an error to say that gonorrhœa is a curable disease?—Yes.

8651. And elsewhere, "We have not yet sufficient evidence to prove that salvarsan cures syphilis"?—No, I think it is too early yet. It has only been in use for a year or two.

8652. Then it is rather a hopeless conclusion that either of the diseases at present is more incurable than curable?—These two particular diseases?

8653. Yes?—No; I should have thought that all the indications were that syphilis, at any rate, was becoming more curable, and very much what Dr. Mott said just now.

8654. (Dr. Mott.) You admitted it, did you not; there were 84 cases?—Yes.

8655. (Canon Horsley.) But you say you have not sufficient evidence to prove that salvarsan is a cure?—Not *per se*.

8656. With regard to your very interesting distinction—the first I think we have had—between the individual and the race, of course you have to begin with the individual before you can affect the race in the future?—Quite so.

8657. I was thinking a good deal about that question before I got your précis. Which is the most common of the two, syphilis or gonorrhœa?—Gonorrhœa.

8658. And which most affects women?—That I am not qualified to judge.

8659. I think we have had evidence about that. Which most causes major operations among women?—That again I am not qualified to judge; I am not a gynaecologist.

8660. Which of the two is less curable in the long run?—I think gonorrhœa.

8661. Medical men in the Army tell us that gonorrhœa is increasing and syphilis decreasing. You think that may be so?—That means they are getting better and more standardised treatment for syphilis.

(Canon Horsley.) They are getting more cases of gonorrhœa.

(Chairman.) I did not understand that we have any evidence that gonorrhœa was increasing.

8662. (Canon Horsley.) Dr. Melville and Dr. Douglas say in the report of last year's conference, "Syphilis, 'from becoming a deadly pestilence, has become 'of manageable dimensions, while the inroads of 'gonorrhœa are increasing.' If they say that is the case in the Army, that would probably be the case in the civil population as well?—Yes.

8663. Which of the two is most likely to be affected by fornication. Say a young man lives an immoral life, or commits an immoral act, which of the

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two is he more likely to get?—The more common of the two.

8664. That is to say gonorrhœa?—Yes, but it depends where it is.

8665. In which of the two is re-infection more common?—Gonorrhœa.

8666. Which of the two produces more sterility?—I should think gonorrhœa.

8667. And therefore which of the two most lowers the birth-rate?—They are not comparable quite.

8668. If it produces the most sterility, it must lower the birth-rate, must it not?—No; because you see there are more births as a result of syphilis, but the children die. The miscarriages and deaths are more frequent.

8669. Which is the more frequent cause of blindness among children?—Gonorrhœa.

8670. I ask those questions because several of the witnesses and much of the literature on gonorrhœa, seems to me to treat gonorrhœa as a minor matter altogether?—I am trying to bring out that such teaching is incorrect.

8671. The general public have the idea, and to my surprise many of the witnesses have seemed to say "Yes, there is such a thing as gonorrhœa," and some of the literature takes the same view. But on the whole we have to keep our eyes as much on one as the other?—Exactly.

8672. And, in some respects, more on gonorrhœa than syphilis?—Yes.

8673. (*Rev. J. Scott Lidgett.*) I am afraid that some of the lay members of the Commission, myself included, were under the impression, which I think a previous member of the Commission suggested, that the case of salvarsan was put a good deal higher by a great many people than you have put it?—Yes.

8674. For the sake of those who are not medically trained, could you give a closer definition of the place you assign to salvarsan in the treatment of syphilis?—Yes, I should think salvarsan is one of the most important methods of treating syphilis and shortening the symptoms when it has once been produced; but it does not cure unless you use it in the very earliest stages of all, and even then I would not trust to it.

8675. Have you any explanation to give us of the way in which it shortens the cure?—Yes; without any knowledge one has a working hypothesis—but you cannot go further than that—that it destroys all those spirochætes which are active, but it does not kill "the spores." But that is a purely working hypothesis.

8676. For that purpose is mercury necessary as well?—Yes; that is a continuous treatment, and destruction of the spirochætes is produced.

8677. But are we to understand that both salvarsan and mercury are aiming at the destruction of spirochætes?—Yes.

8678. And that neither of them is sufficient to accomplish it?—Either of them may accomplish it.

8679. You may almost say that the two are taking the spirochætes in front and in the rear at the same time?—If you like; any working hypothesis you like, only they are better combined than they are individually.

8680. Is the system followed of alternate treatment?—Not necessarily alternate. You can combine the two. You can give an injection of salvarsan or neo-salvarsan—

8681. But the salvarsan or neo-salvarsan comes first, does it?—It comes first, because that is the earliest stage of all.

8682. How many injections of salvarsan and how long a treatment do you think is required?—As many as are necessary.

8683. That is to say, until the Wassermann reaction is negative?—Until the Wassermann is negative.

8684. You have been asked some questions about education? Do you find the people who come to you are for the most part ready to take warning in all these matters?—It depends upon the individual, as it does in everything else; some are and some are not. Some are quite ignorant and only glad to be told,

and others are quite callous and do not take any heed at all.

8685. That is not a class distinction?—It is not a class distinction in the least.

8686. Do you often find they blame their own ignorance for the trouble they have fallen into?—No.

8687. Perhaps they do not make disclosures on that subject?—One does not ask them. One is only concerned with the treatment.

8688. Have you thought whether we should recommend any very elaborate arrangements for trying to educate the public, apart from the gradual spread of information?—I think it must be gradual. It is much better done gradually than by any wave of great effort.

8689. You do not advocate organised educational methods?—No, I do not think so. I think you do more harm than good very often.

8690. On what ground?—On the ground that you set boys and girls thinking about things, which it is undesirable that they should be taught specially about.

8691. But I thought one part of the case was that the trouble largely exists because they have not thought enough about it?—Yes, when they have it; but in that case I do not think forewarned is necessarily forearmed. I think human nature will make them go wrong, whether you teach them or whether you do not.

8692. Do you think it is very largely a matter of impulse?—Very largely.

8693. Which is not amenable to education?—No; I would much rather see them properly educated in the way of athletics and things of that kind, and taken out of themselves. It is very often idleness. The opportunity is taken away from them.

8694. (*Mrs. Burgwin.*) I think you said you would like to see a laboratory attached to each hospital for the test?—Yes, I should.

8695. Then, in answer to the Chairman, I think you rather agreed that a central laboratory would be more economical?—I think possibly it might be. It is a very expensive thing to keep up a laboratory; but on the other hand nearly all our hospitals have laboratories attached, and therefore perhaps it would be only increasing the personnel, so it might not be so expensive to enlarge the present accommodation as it would be to set up a central place.

8696. Then, also on the ground of economy, I think the Chairman advocated a central laboratory; but I gathered from your answers you did not think it would be so efficient as one detached?—Perhaps not so convenient would be a better word than efficient. It would be equally efficient; but it might not be so convenient if you had to wait two or three days for a report and you could not go and see it yourself.

8697. That is what I wanted to put?—Very often if it is on the premises you go up and see how things are going on, and you know your pathologist; whereas if it goes to a central institute there is difficulty in getting there, and you probably never would go if you are a busy person. Consequently, you would have to trust to the written report.

8698. I think that brings me back to my point, that efficiency rather than economy should be our guide in this matter?—I think so. I think the State would be well advised to spend a great deal of money. The economy question should not come in.

8699. Then you have been very emphatic that a man infected should not marry?—I think not. I do not think it is fair to the woman.

8700. He goes and consults you when he thinks of being married?—Yes. After you have treated a man for some length of time, the usual question is, "When may I marry?" He does not come specifically to consult you.

8701. I was only thinking he ought to come earlier. He ought to come when he thinks of being engaged really, or else you would have many breaches of promise, I think?—No, I do not think those are the cases. It is not people who are engaged who get these diseases and come; it is people who are not engaged, in a great number of cases—anyway, in the better-class practice.

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8702. But he comes to you when he thinks of being married, and therefore an engagement has taken place?—No, he does not; he comes for treatment of the disease; he does not come to know whether he can marry or not.

8703. But I gathered from your evidence you tell him in such and such a condition he has no right to marry?—Yes, after you have treated him for this particular disease.

8704. Then if he leads an irregular life, he may infect many women instead of one?—Yes, but it is a question how many of these women are themselves immune and what they are going to be infected with; whether they are going to be infected with syphilis, which they are probably immune from, or whether they are going to be infected with gonorrhoeal infection, from which they are not immune. It depends to a large extent on the disease.

8705. You would not suggest that it should be made a penal offence for a man or woman to infect. I will put both sexes?—No, it is very difficult to do that.

8706. Yet the effect is so serious, is it not?—Is it more serious than infection with tubercle?

8707. Yes, I think so; at least, I have a greater horror of it?—That ought to be penal, too.

8708. (*Dr. Newsholme.*) I gather you think that the process of education against venereal diseases should be a gradual one?—I do not see any other way.

8709. In order to be effective?—To be effective.

8710. You have not a great deal of faith in the prohibitive influence of education?—No, as long as human nature is young.

8711. You think that passion is so strong that although young people were fully warned as to the dangers, there would not be as the result of that warning much decrease in the amount of venereal disease?—I am afraid not.

8712. Would you put it so high as that?—Yes, I think one almost would. A certain number of people would be restrained. I would rather put it the other way. If you are going to do anything you had better keep them out of harm's way. Take the Universities, for example. I take it very few of the people at Oxford or Cambridge are infected, or very rarely so.

8713. Because they are out of harm's way?—Yes, it is in the vacations that they get into trouble.

8714. That you would put down as a question of the police?—Yes.

8715. And you yourself regard such policing influences, using that word for this purpose, as better than education?—We will call it proctorial; it is internal policing, I suppose.

8716. Taking the example you gave with regard to arelessness about venereal diseases amongst the upper classes, in your view is that common?—I think so.

8717. In their case it would appear from your experience that familiarity with these diseases breeds contempt?—Yes; all their friends have had it probably, or a large number of them, and they have seen what the results have been.

8718. If we are to adopt your view, would it not follow that one cannot look for much help in educational influences except the education of medical students and medical men?—Yes, the decrease of the disease being due to early recognition and early treatment.

8719. Your field of education which is desirable with regard to these diseases is limited to such education as will lead to prompt diagnosis and effective treatment?—Yes; I am sure that is the basis of the whole thing if you are going to reduce it from the State point of view.

8720. If you had to conduct an educational campaign with regard to this disease it would be amongst medical students and medical practitioners?—Yes, I think so; and you would hope in the next medical generation that the knowledge would be diffused, and so on.

8721. Turning to the question of stricture of the urethra, what is the most common cause of that?—Gonococcal infection.

8722. Is it often due to any other cause?—Yes, injury.

8723. Will you carry your mind back to your experience on the subject of stricture of the urethra? What percentage of the total cases you have seen has been due to injury?—About one per cent.

8724. So that 99 per cent. of cases of stricture of the urethra in your experience are due to gonococcal infection?—Yes.

8725. That is quite a common cause of serious disease, as you said, 40 or 50 years after the infection has been received?—Quite common.

8726. If the treatment of acute gonorrhoea is good, is the danger of stricture of the urethra supervening diminished?—Yes, materially.

8727. In such treatment do you include the passing of bougies or only medical treatment?—No; you must have local treatment as well.

8728. Local treatment by injections, you mean?—Yes.

8729. Your experience is that the cases of gonorrhoea which are followed by stricture are cases in which an early treatment has not been well managed?—Has not been well carried out, or the disease has been unusually severe. There are a certain number of cases in which it goes on indefinitely.

8730. I was interested in, shall we call it the financier's family which you mentioned, where apparently as the result of syphilis, mental degeneracy occurred in the second or third generation?—Yes.

8731. Of course, it is open to that interpretation, and that is probably the right interpretation; but there is the alternative interpretation, that the families go down and go up in mental development as well as in physical development?—Yes.

8732. And this may have been part of the natural history of that family, and have had nothing to do with syphilis at all?—Yes, perfectly.

8733. You agree there is that alternative possibility?—Yes.

8734. But you have seen it so frequently associated with a history of syphilis, that you think there may be a relationship of cause and effect?—I think so.

8735. It would be impossible to be very positive on that point?—It is impossible to be positive. There are so many factors come in; but that was a common factor in several cases.

8736. Then coming to the question of cancer of the tongue, you attach high importance to syphilis as a cause of that?—Yes, and more and more as we get better tests.

8737. I take it it is a law with regard to the production of cancer, that it is the result of mechanical irritation in a predisposed person?—Not necessarily mechanical.

8738. Some irritation?—Yes.

8739. Local irritation in a predisposed person. You would accept that?—Yes.

8740. One of the forms of irritation in the mouth may be decayed teeth?—Yes.

8741. Smoking a clay pipe?—Yes.

8742. The late Mr. Butlin, I think, thought that the fumes of tobacco had some specific effect as well as irritating effects?—Yes.

8743. There is a good deal of evidence of that?—Yes.

8744. Then would you put syphilis of the tongue as a cause of cancer of the tongue, in the same category as rough teeth, clay pipes, and smoking, or would you put it in a different category?—No; a good number of those people who have epithelioma, or cancer of the tongue, and had smoked clay pipes and had ragged teeth, and so on, have had positive Wassermanns, which is very suggestive that they also had syphilis.

8745. What is the relative prevalence of syphilis in men and women; have you any idea? I can give you the figures of deaths from the Registrar-General's figures, which I admit are very poor, but they may give us some idea of the proportion between female and male mortality. The mortality among males is three as compared with two among women. Is the

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proportion of cancer of the tongue in men to that in women, as three to two?—No.

8746. It is much less common in women, is it not?—It is much less common in women.

8747. So I put it to you, assuming the data for syphilis to be fairly correct, then syphilis does not account for the excess of cancer of the tongue in men?—No, but on the other hand, women do not smoke, at least, not clay pipes, except in Ireland, where there is very little syphilis.

8748. So that it may be the smoking after all, and not syphilis?—Yes. The only point is that these people, even the women, who have cancer of the tongue, have also a positive Wassermann.

8749. I am not denying, or I have not even much doubt about the assertion, but I think it important to bring it out in relation to other things. As a matter of fact, I have worked out this afternoon, from the Registrar-General's figures, the proportion of cancer of the lips among men and women, and the proportion is 100 to 28?—Cancer of the lips is an entirely different thing.

8750. I will take cancer of the tongue then. The proportion of men and women is as 100 to 42; whereas, according to the Registrar-General's figures, the proportion of syphilis is as 3 to 2. So that I suggest to you there must be some other factor or factors which are not comprised in this syphilis?—Yes; that is the unknown cause of cancer. One does not know what the cause is.

8751. Which appears to operate more in men than in women?—Yes.

8752. (Dr. Mott.) What proportion have a positive Wasserman. Do they all give it?—All I have tested since we have known about it.

8753. How many?—I cannot give you the figures off-hand.

8754. Is it a considerable number?—Yes.

8755. (Dr. Newsholme.) Now with regard to tuberculosis; you laid it down that this disease, in an important proportion of cases, is encouraged and favoured by syphilis. You know, of course, that typhoid fever occasionally brings on an attack of tuberculosis?—Yes.

8756. And measles the same?—Yes.

8757. And influenza the same?—Yes.

8758. If tuberculosis was there before, these acute diseases, so to speak, set the thing in conflagration?—Yes. Is that the right way of looking at it quite, or should it be looked at in the other way?

8759. Explain to me how you look at it?—I should have rather thought any of those conditions led to what Dr. Mott called devitalisation, or diminished vitality, at any rate, and therefore rendered them more susceptible to tuberculosis infection.

8760. But that does not fit in with what we know about the long latency of tuberculosis, about which Dr. Mott has written a great deal. After these attacks of typhoid fever, influenza, or measles in children, we get tuberculosis starting in a few weeks or months; so that my simile is the better of the two?—The particular cases on which I was basing it were three or four cases I had one after the other close together, in which people with congenital syphilis had grown up to be 22 or 23, and had afterwards developed tuberculosis.

8761. The age of 20 to 25 is a very common age for the development of tuberculosis?—True.

8762. Have you worked out any corresponding figures to show the development of tuberculosis among these congenital syphilitics was more frequent than among the average population?—No.

8763. It would be a very difficult thing to do?—It is a very difficult thing to do.

8764. Again, it is your clinical impression?—It is an impression more than anything else, and a clinical one purely.

8765. It is an impression to which we, as doctors, trust, and often trust without failure?—Yes; you watch the people grow up, and you find they die off from tuberculosis, whereas other people who have not had syphilis do not.

8766. With regard to the name which I have boggled at of the genito-urinary department, we wish

you to suggest a name to us, but I am a little doubtful about that being the right name?—I am not wedded to any name so long as you do not call it "venereal."

8767. I think we should all be inclined to agree to that; but we have all objections to this term genito-urinary. I am not sure it is not almost as deterrent as the other. You have no doubt at all that if hospitals for syphilis are to be properly organised, they must be subsidised by the State?—I think so.

8768. And you would say the same with regard to laboratory diagnosis for syphilis?—It is the same thing now; they cannot afford it.

8769. That applies to laboratory work as well as to clinical work?—Yes, you must have treated people there.

8770. And, therefore, the State must subsidise?—It must do.

8771. With regard to this question of the marriage of the patient, who came to you for a short period with primary chancre and married within a fortnight; that was tantamount almost to murder of his prospective children, was it not?—Yes; but I believe, as a matter of fact, they have done very well. Theoretically it ought to have been so, but it was not. That is just the difficulty with these people. He had no children for four or five years afterwards. He took that amount of advice.

8772. But he ran the risk?—He ran the risk.

8773. He ran the risk of infecting his wife and killing his family?—Quite so. That was put to him quite plainly. He said, "I shall take the responsibility. I am engaged, and I cannot get out of it. I am going to marry."

8774. Have you any remedy to suggest for such a dilemma that you were put in on that occasion?—No, I do not know what one can do.

8775. Do you think the secrecy of medical practice ought to be maintained even though it is possible that that kind of thing may happen and does happen?—Yes; because a case like that will be brought up directly against you.

8776. Is the fact that the consequences have not come off in a particular instance any good reason why something should not be attempted to prevent that terrible evil arising?—No; but I should not be prepared to suggest anything.

8777. (Mrs. Creighton.) May I ask a question about the consequences?—I thought you said the particular man arranged not to have children for five years; so in so far he followed your advice?—Yes, I suppose he did.

8778. (Dr. Newsholme.) I did not gather he arranged that?—I said he had not.

8779. (Mrs. Creighton.) You said he took precautions?—Yes, I said he had no children for four or five years.

8780. (Dr. Newsholme.) Turning to the main question, which is a question which occupies my mind and must occupy the minds of the Commissioners a great deal, that is, as to whether anything can be done to prevent that awful possibility in that particular set of circumstances; do you think if it were the law of the land that in such circumstances it should be part of your duty as a practitioner to notify that this man is doing what ought to be a criminal act, that will be a proper thing to do or not?—Would they come to you if it were part of the law? That is one's difficulty.

8781. I admit the difficulty at once?—I doubt it very much. The kind of people who thought in that way would probably never come near you.

8782. Then that brings one to what is my inference from your answer to my question; that is, although you would think it right, I believe, to have such prospective misconduct notified to the proper authorities, yet in all probability it would lead to more mischief being done at present, because the patient would not come to you, but would go to an unqualified practitioner?—I think so. I think that is going back to the old process of concealment, which has been far too prevalent.

8783. A good deal has been said in evidence before the Commission as to the lack of education of medical students. I gather you do not agree with that?—Yes,

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I do. I do not think they have been properly taught, and I think a great deal more might be done to teach them at the present time.

8784. A great deal more might be done; but if you had to compare the state of education of a qualified man who left your hospital five years ago with that of a pharmaceutical chemist or a herbalist in the district in which he practises, what would you say about it?—The medical student is much better qualified to decide and judge, of course.

8785. How is he better qualified in relation to these diseases?—He is always taught bacteriology.

8786. But has he not also learned the general pathology of medicine?—Yes.

8787. And in those books and lectures on general pathology of medicine, the symptoms and consequences of these diseases are dealt with?—Yes, certainly.

8788. So that even if he has not seen the cases, his general knowledge puts him in a very much better position than the unqualified practitioner?—Naturally.

8789. With regard to salvarsan, you have some doubts as to its being a cure. You say the time has not yet arrived?—We have not come to the time yet. It is only two or three years, and we want at least ten years.

8790. But I would like to have your opinion as to the rapidity with which the power to infect others disappears under the salvarsan treatment and under any alternative treatment?—I cannot help you there. I do not know.

8791. If I may say so, I think you can. You have already told us that the primary sore disappears much more rapidly after treatment by salvarsan than after any other treatment?—Yes; not only the primary sore but all manifestations, or many of the manifestations.

8792. Is not the infectivity of syphilis connected specially with these sores?—Yes.

8793. If these sores go more quickly under one treatment than another, is not that treatment superior from a public health point of view?—No. I suppose one is not clear whether you get your mouth infections equally cleared up or whether they are stopped. I do not know enough about that; but they are infectious.

8794. One of the main sources of infection is by sexual intercourse, is it not?—No, one of the methods.

8795. The main method, I will say?—No.

8796. You do not agree with that?—No; there is kissing and lips.

8797. I speak without knowledge, and you have great knowledge on this point; but surely it is not true that kissing and all other methods of infection bulk up to anything like the number of infections which are due to sexual intercourse?—No, under ordinary conditions; but again, as you see it in private families, I do not know whether it does not come through the lips more often. One can recall a good many cases where infection has taken place in that way.

8798. If you were examining a class of students on this point and you were asked what percentage of cases were spread sexually and what percentage of cases were spread non-sexually, what would be your statement?—I should say a large number sexually, but a proportion in other ways.

8799. Five per cent. non-sexually?—Yes, say 5 per cent.

8800. I want to get some idea?—I only want not to give the impression that that is the only way in which it is spread.

8801. No; but you would agree with me that 80, 90, or even 95 per cent. are communicated sexually?—Yes.

8802. And say 10 or 5 per cent. non-sexually?—Yes.

8803. Then I think it does come to this, does it not: that salvarsan causes the symptoms with which infectivity is associated to disappear more rapidly than other forms of treatment?—Yes.

8804. Therefore the treatment by salvarsan, you will agree, must be a very important means of preventing the spread of disease?—Yes, very important.

8805. More important than any other known means of treatment at the present time?—More rapid it may be.

8806. Therefore more important?—Yes, more important in the sense that it is more rapid.

8807. And the importance varies with the rapidity, does it not?—Yes, I suppose it does.

8808. Speaking as a public health man, I should most definitely say it did?—Yes, I should say it does.

8809. I want to ask you one question about the 83 police cases put to you by Dr. Mott. The 83 police constables were reported sick at the Military Hospital from primary symptoms and only three developed secondary systems; a few of them became re-infected. That happened under the influence of salvarsan. Dr. Mott asked you to conclude that therefore they must be cured. Is there not another alternative possibility, the possibility that they never had syphilis?—Yes.

8810. They may have had a sore?—Yes; one is assuming there that the diagnosis was a correct diagnosis.

8811. Before Dr. Mott intervenes, let me add that in the statement before us as to those 83 constables, it is not stated whether they were each examined for the presence of the spirochæte or not. If they each had the spirochæte, then the original statement stands.

(Dr. Mott.) They were sent to Rochester Row, were they not?

(Dr. Newsholme.) Yes, they were sent to Rochester Row.

(Dr. Mott.) And they had a chancre. They would not inject salvarsan unless they found the spirochæte. They gave us definite evidence to that effect.

(Dr. Newsholme.) The definite evidence is not in this statement.

(Dr. Mott.) But that was the definite evidence given before the Commission; that they do not inject salvarsan until they have found the spirochæte.

(Chairman.) I gathered that that was their regular routine: that no salvarsan would be given unless the spirochæte were found.

(Dr. Mott.) No; no salvarsan would be injected without it.

(Dr. Newsholme.) If that be so, my point is bad.

8812. One other question. You were asked as to the relative incidence of the effect on the birth-rate of gonorrhœal infection and syphilitic infection. I take it gonorrhœa causes sterility very commonly?—Yes.

8813. On the other hand, syphilis probably causes some sterility; but much more often it causes miscarriages, still births, and deaths afterwards?—Yes, within the first two years, therefore it is difficult to compare the two. In the one case there is not anything to compare because there are no children. In the other case they are mainly dead children.

8814. (Chairman.) In cases of congenital syphilis which come before you, would you always tell the patient the cause of what he is suffering from?—No, I do not think you are justified. It reflects very much on his father and mother, does it not?

8815. You would not tell him that he was actually a syphilitic subject?—No, because it is of no practical importance. He is not infectious.

8816. Then unless he were told exactly what he was suffering from, could he be expected to go on with the treatment which his case required?—He comes to be cured, does he not?

8817. But he would like to be told?—All you tell him is that you can cure him; but very often he is not curious to know what the particular disease is.

8818. If it were possible, do you think it would be a good thing to make it obligatory on a doctor to give every patient in whom he had diagnosed syphilis or gonorrhœa a printed statement giving some account of the disease and what it rendered him liable to?—I think that would be a very good thing to do, and then it would rest with the individual whether he read it or tore it up.

8819. You think it would be a good thing?—I think it would be a good thing, and then he could not plead ignorance.

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[Continued.]

8820. I understand you are absolutely opposed to any attempt to spread knowledge of these diseases and their effects to young men and women, which has been urged on us by some of the other witnesses?—Personally, I do not think it is desirable.

8821. You do not think it would be a good thing?—I do not think it is desirable in my personal opinion.

8822. You would trust rather to the growth of education through the medical profession?—Yes, just as knowledge is spread of other things.

(Chairman.) We are very much obliged to you.

(Dr. Mott.) May I ask one question arising out of the question you have asked, my Lord?

8823. Supposing a patient came to you suffering from congenital syphilis and you ascertained that there were other children, younger children, would you then think it was desirable to acquaint the father and mother of the possibility of those children, if they did not have treatment, suffering in the same way as the patient who had come to you, and make it desirable to have the Wassermann reaction done?—Yes, I would have a

Wassermann reaction done. You would treat the father and mother, would you not?

8824. Yes, but you would have to tell the patient then, would you not?—Yes, but I was thinking of the later cases, when they came at 18 or 20.

8825. As a matter of fact many of these children develop serious disease later in life?—Yes.

8826. Such as juvenile general paralysis?—Yes, but I think what the Chairman asked, was whether you should tell the individual who had the congenital syphilis; that is quite a different thing from telling his parents.

8827. (Chairman.) That is quite right. I was thinking of adult persons?—So was I.

8828. But in the case of a patient in which you discovered congenital syphilis, would you make a point of telling the parents?—Yes, then I think the parents should be told.

8829. You do?—Yes, because you would prevent after trouble with the other children.

(Chairman.) Thank you.

The witness withdrew.

TWENTY-THIRD DAY.

Friday, 6th March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLEIB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

The Hon. ALBINIA BRODRICK called and examined.

8830. (Chairman.) You have had great experience as a nurse, I understand?—I have had some experience for some years now as a nurse. I have carefully studied my profession, and have worked practically at it.

8831. You have some strong ideas as to the training of nurses?—I have, which are backed up by the foremost members of my profession.

8832. Do you think you generally represent the views of the more advanced members of the nursing profession?—I am absolutely in accord with them, and I am here representing the Irish Nurses Association and the National Council of Trained Nurses of Great Britain and Ireland, and they desire me to represent their views in the matter.

8833. We may take it that your evidence, generally speaking, represents their views?—That is so.

8834. You have also had experience as a health visitor?—Yes, in St. Pancras.

8835. I suppose that gave you a certain amount of valuable knowledge bearing upon these diseases?—A certain amount, not a very large amount.

8836. You say: "Our first step towards prevention" and cure lies in lifting it out of the enticing but "dangerous realm of mystery into the prosaic light of "scientific fact." What do you mean precisely by that?—I mean that at present the majority of the world, certainly in Great Britain, knows practically nothing of these diseases, and many do not suspect them. I mean also that even nurses have not been properly instructed in these diseases, and, if I may be excused for saying so, I should put doctors, on their own showing, into the same category. I feel that the ignorance is extreme; and that until we have knowledge

and can treat the matter scientifically, instead of as a mysterious something that we must not talk about, we are not likely to make any serious advance in dealing with them. Education, to my mind, is prevention.

8837. You think that both the medical profession and the nursing profession at present lack adequate knowledge in dealing with these dangerous diseases?—I do. I speak with reserve of the medical profession, because they know more about their own profession than I do. At the same time members of it have spoken to me on the subject most definitely, and as regards my own profession we do not know one tithe of what we ought to know on the matter.

8838. Do you think that all nurses should go through some special course of instruction in connection with these diseases?—I do, most definitely.

8839. Turning now to the general community, you say, knowledge, widespread through the community, medical nursing and lay is the second important stage to take. When you say knowledge widespread through the community, how far do you mean you should spread such knowledge?—Absolutely widely. I would deal with this as if it were smallpox or scarlet fever, simply as a disease, quite apart from the moral side which must belong to others. They should deal with it from the moral side, but I feel that we have to deal with it as a purely professional matter—as a disease, and nothing else. Until we can do so, we cannot hope to get at the innocent who are constantly being infected simply through want of knowledge, and, when I say the innocent, I even include many men and many women who knowingly do acts of unchastity without the

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[Continued.]

slightest idea of what they are bringing upon themselves by so doing.

8840. We will return to the question of instruction later on. Meanwhile, do you think the Press should be absolutely free to express itself about these diseases at all times as it would about tuberculosis?—I do. I should so far lift it out of the venereal point of view that I would abrogate that title altogether. I would not call it venereal disease.

8841. Have you another title to suggest?—I have not. That is for the doctors, I think, rather.

8842. You say that in your professional capacity you have become aware of the extreme unwillingness of many medical men to return venereal disease as a cause of death on the certificate. We have had previous evidence on that point. Have you any suggestion to make for better and more trustworthy registration?—I think the first thing is education. You cannot have trustworthy registration until you have an education which will enable you to register properly.

8843. You think that when knowledge has been sufficiently spread, and when the public has come to put these diseases on the same footing as others, then the reluctance of medical men to return them as the cause of death will disappear?—I hope so.

8844. You draw attention, of course, to the case of infants, and I suppose you have had some experience of them?—I am a midwife.

8845. And therefore in those cases you often come across women who are infected with these diseases?—I do come across perhaps rather children; but I observe that now it is beginning to be held that if a child is infected it is unwise to consider that the mother is not infected. That of course, is only a more recent development, as I understand. I have come across the mothers infected also.

8846. You think all midwives should have special instruction in order to be able to detect these diseases, and report them if necessary?—Absolutely.

8847. You say, "deaths are no criterion of the incidence of the disease and neither is medical practice." I think we all agree that the returns of the registrar general are no criterion of the incidence of the disease amongst the civil population. That is your opinion too?—It is.

8848. You tell us, what a great many witnesses have already done, that a large amount of patients resort to quacks. Have you any special statement that you would like to make of your own knowledge?—The only thing that I can tell you is this. Not long ago I was speaking to a medical man in one of the most immoral towns in England, and I asked him why he gave so few of his patients as having venereal disease. He said "Why, because they go to the quacks. We do not get them." It is common knowledge to us that they do so.

8849. Have you come across a number of cases in your experience which have been mistreated by quacks?—No, because I have not come across these cases that have gone to quacks myself.

8850. You tell us that a great factor in the spread of venereal disease is the ignorance in which women have designedly been left in regard to it. Do you think that a doctor should always make a point of telling a woman the nature and the danger of the disease if he finds that she has become infected with it?—I am one of those who think that a patient has a right to know what her disease is, quite apart from every other question.

8851. And you think it should be done as a matter of ordinary medical duty to inform any woman, however she acquired the disease, that she has got it?—I do not think however she acquired the disease comes within the question at all. She has the disease and she has a right to know that she has it.

8852. You would ignore the possible domestic difficulties?—Absolutely.

8853. But do you think that is not now done?—I know it is not done.

8854. You are aware that it is not done?—I am aware that it is not done. We, as nurses, have no right to diagnose, and I have had to take a woman from

her own doctor, who absolutely refused to tell her what was the matter with her, to a doctor on whom I could rely the moment she put the question to answer it in the affirmative.

8855. You are convinced that it is not the general practice of the medical profession to tell any woman if they find her infected?—They state it so themselves.

8856. Where have they stated it?—Dr. Shilitoe, I think it is, an American, has told us so definitely. He says; "Not infrequently do we treat them without letting them know the nature of their disease, because it is impossible to discuss it with them as openly as we do with men." I am fully aware in hospital practice, I do not like to say every woman, because that is making a very definite statement, but every woman with whom I came in contact was sent out without knowing that she had the disease.

8857. You are speaking now of women who were treated in hospitals?—Yes; not in lock hospitals. I have never nursed in a lock hospital, but of course we get them in general hospitals.

8858. You do get a certain number of cases?—Yes.

8859. You tell us in all these cases the woman left the hospital without being told of the disease she had acquired?—Absolutely unaware of it.

8860. Of course, Dr. Shilitoe's experience is American, and American ways are not the same as ours?—They are easier and freer in speech than we are.

8861. (*Sir Malcolm Morris.*) Dr. Shilitoe is not an American; he is an Englishman, and he is at the Lock Hospital here?—I am sorry. I ought to have known better.

(*Dr. Newsholme.*) Is it the same Dr. Shilitoe?

(*Sir Malcolm Morris.*) There is not a Dr. Shilitoe, to my knowledge, in America; certainly not an authority on this subject.

(*Witness.*) I think there is only one.

8862. (*Chairman.*) You say nurses in attendance on venereal cases and exposed daily to infection are not made aware of their danger. But surely nurses in lock hospitals, or nurses who have to attend in wards where these diseases are treated, must be warned and told something about them?—In lock hospitals no doubt they know; but the majority of these cases are not treated in lock hospitals. There is very small accommodation in lock hospitals for these cases.

8863. But it is your strong opinion that all nurses, as part of their training, should receive adequate instruction in the handling of these diseases?—It is.

8864. Now, turning to what you call preventive and curative measures, you say that the want of facilities, that is the facilities for treatment, in England, speaks ill for our care of our sick. Can you give us evidence of any special want of facilities in England?—There are hardly any facilities.

8865. Do not the hospitals with which you are acquainted take these cases when they come before them?—They do take them.

8866. And they treat them?—They treat them, and they very often send them out uncured.

8867. Do not the out-patients department of our hospitals take such cases and treat them?—I cannot answer for all hospitals; in all probability they do. But they do not do the one thing necessary as a routine matter, and that is, supply them with the necessary information, added to which, if I may say so, in a large number of cases it is most ineffectual to endeavour to treat them as out-patients. They are given some instructions as to what to do, and we nurses who see the thing from the intimate side, know that it is either not done, or done in a most unsatisfactory way, especially in regard to children. They do not carry out the treatment in the manner in which we now consider the treatment must be carried out, and in which it is carried out in the more advanced lock hospitals.

8868. Then you are strongly of opinion that we ought to increase the facilities for free treatment of all these diseases, and that what you call evening

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cliniques are specially important?—Very important; because many people can come in the evening and nothing will be known about it.

8869. If these facilities were given in greater measure, you think patients would readily come to them?—No, I think they would need educating first. We must get rid of the stigma; they will not readily come until we get rid of the stigma.

8870. And you think the stigma will only be removed by a more general spread of knowledge?—Yes.

8871. You say: "Under treatment should be included printed instructions to out-patients, dealing with the gravity of the disease, the danger of infecting others, and necessity for carefully carrying out curative measures." Do you mean there should be some general printed form which should be given to all persons in whom these diseases have been diagnosed?—Yes.

8872. You think, if it were possible, there should be a law that that should be done in every such case?—Yes. It would not be sufficient. That would not be the only thing, but that is one of the primary matters.

8873. In the case of women especially, you say the result to the offspring should be clearly pointed out. Of course you do not confine it specially to women, because the results to the offspring in the case of the man may be equally serious?—I am only emphasising the matter of women, because women have been left so much in ignorance. I think they are more ignorant than men. Of course it is equally important for the men.

8874. Then you have given us your views as to the education of the medical and nursing profession. I should like to know what you would propose to do as far as the young of both sexes are concerned. At what ages would you give them instruction in the laws of sex?—I should begin from the very beginning.

8875. At the primary school?—Before that.

8876. Before that?—Long before that. I should take away a great deal of the mystery which surrounds, and has been made to surround, the natural laws of nature.

8877. Do you think that very young children ought to be initiated into these sex matters?—Not as far as disease is concerned, of course, but as far as sex is concerned, as has been done, and done with the greatest success by a good many mothers during the last 10, 15 and 20 years, but only by those who are most understanding.

8878. Who should give this very important and very delicate instruction?—At present you will have to train people to do so.

8879. You would not let the ordinary teachers in schools, would you?—Certainly not—not at present.

8880. By lecturing on these things, or reading them out from a book?—Certainly not.

8881. You think it would be unsafe to commence this education on a large scale until you had prepared a band of specially qualified instructors?—I think you could begin it on a small scale at first. You have a certain number of women—I say women, because I think, as a rule, women are the natural instructors of the young—who can already do it; but they are very few.

8882. As matters now stand, would you allow lessons to be given in our primary schools to quite young children on sex matters?—Yes; I would do it through the medium of botany.

8883. You would lead them on from botany to the human subject?—Yes. Of course you have that admirable series of American books, which shows how very simply it can be done. They are books published by the Society for Sanitary and Moral Prophylaxis.

8884. That is this voluntary society?—Yes. Dr. Prince Morrow was the first head, but he is now dead.

8885. Then you propose the segregation of the feeble minded and habitual alcoholics. I suppose the new Act dealing with the feeble minded, to a great extent, meets your views?—I do not know sufficient about that Act yet. I have been very busy with my own

work and I have not had the opportunity of properly studying it. I only know it partially.

8886. As regards alcoholics, would you segregate them compulsorily?—Habitual alcoholics.

8887. You would detain them compulsorily?—Yes.

8888. Until you regarded them as cured?—Yes. America goes further; she sterilises in certain cases.

8889. In which cases?—Some of these feeble minded and habituals.

8890. In which of the American States, do you know?—No, I am sorry I cannot tell you.

8891. Are you sure that that is done?—Absolutely certain. I read a definite medical report on it only the other day. I am sorry I cannot give you the reference. I do not say that is my remedy. I merely say that America does go further than we do in those matters, and has sterilised.

8892. Then you wish to see the cultivation of discipline and self-control in the home. That seems most desirable, but how would you set about it?—By educating our fathers and our mothers. I think the whole of the education goes hand in hand.

8893. And that with adequate instruction to the children of the present generation, the cultivation of discipline and self-control in the next generation will begin?—Yes; it may begin again.

8894. You allude to the notification of these as of other infectious diseases. What form of notification do you advocate?—At present confidential, merely because the matter is so difficult at present; but later on simply as you notify any other infectious disease.

8895. Confidential from whom to whom?—From the doctor to whatever board it may be. I do not know what board he would communicate with.

8896. To the officers of public health?—Yes.

8897. What effect would that have?—You would get more knowledge as to the incidence of the disease. That is the first thing we require.

8898-9. And you do not attach any importance to what we have been told; that if you made it compulsory upon the doctor to notify, nobody would go to any doctor whom he did not think was capable of evading the law?—I think that is perhaps a negligible quantity; because we already have so much difficulty in regard to people not going to the doctors when they should do so when they are aware they have these diseases. I think with education, and the treating of the thing scientifically, that would disappear. We are sure to have a difficult time, but there is a difficult time in all changes. We should at first.

8900. I suppose you would agree it is not notification that is the important matter, but the following up of the notification by securing treatment and complete treatment of the patient?—Certainly. I think we require the notification in order to enable us to form some conception of what amount of disease there is.

8901. We should have better knowledge?—We want better knowledge first.

8902. I admit that; but it is not equally clear, is it, that we should be able to secure more complete treatment?—The more we know about it the more we—I should not say we, because it is a doctor's matter; but the more the doctors will be able to treat it.

8903. Take the case of a person who had been notified by his doctor to the health authority and had been told he was diseased, but went about and infected other people; would you do anything to him?—That is a very difficult question. I do not know that it would be possible at present.

8904. If we put the disease on exactly the same footing as smallpox, ought we not to put him under some restraint as we should if he were infected with smallpox?—I do not think at present it is possible. I think later on public opinion will demand it.

8905. For the first step you would merely insist upon notifying?—Yes.

8906. How would that affect the medical etiquette and the law?—That is what I want to know. I am not sufficiently cognizant of the law to know that. The one thing I do know is, that when nurses have desired a fuller information themselves, or a fuller information for their patients, they have been continually met, I do not say by every medical man, but I

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have been so met myself, by the statement that doctors would render themselves legally liable even by telling the nurse that the patient had contracted that disease.

8907. If that is the present state of the law, I take it you would change it entirely?—Yes.

8908. And relieve the doctor from any obligation, whether of etiquette or any other, from communicating the fact?—The matter seems to me so simple. If it is an infectious disease, the doctor's duty is that it should be recognised as such. I want to see it taken out of the moral point of view altogether as far as the disease is concerned.

8909. I see that you think that England is regrettably behind the times in dealing with venereal diseases. I suppose that is because we have no such large society as you have referred to in New York and in New Zealand?—That New York Society is only one; it is the parent. In many of the States they have it. They do not call it exactly by that name, but they have societies dealing with venereal disease, the spread of it, and education with regard to it. Of course Germany has a large society, France has, and so on.

8910. And you think those societies have done real good?—I am sure of it.

8911. You have not any evidence as to any decrease in prevalence which has been created by the operations of those societies?—Rather that public opinion is growing in those countries in the right direction.

8912. You look upon these societies as being rather created for the purpose of educating public opinion than as having any direct influence upon the prevalence of the disease?—Through public opinion.

8913. When you say that Germany, France, Denmark and Switzerland have all outstripped us, I suppose you mean in the direction of these private societies for the education of the public?—Yes.

8914. Not in any legal sense?—I could not say that with certainty; but there is a freer spirit of scientific knowledge in those countries with regard to them. You will find nurses, for instance, are better educated in the matter. I do not say they are completely educated; they are not.

8915. Would you like to make any definite suggestions for the improvement of the training of nurses?—In this particular?

8916. Yes; these particular diseases?—Certainly, I consider that every nurse should go through a definite training in all these diseases. Most nurses are unaware at present of their own personal danger.

8917. There would be a difficulty, would there not, in getting that practical training, as there are not a large number of hospitals dealing with these diseases on any considerable scale?—Even lectures dealing with the subject would be a help.

8918. You think courses of lectures on these special subjects would be of advantage?—Yes.

8919. And you would make that, if you could, a compulsory part of a nurse's training?—Yes, I should; but not lectures in the ordinary curriculum: lectures at present given by a specially trained person.

8920. You think that instruction given in the form of lectures should be at all events sufficient to save nurses from the risks they now run, and also put them in a better position for treating the patients that come under their care?—It would at least mean knowledge. It would mean that one would not meet a middle-aged nurse who had never heard of such a thing, which in itself is a danger not only to the nurse but to the patient and other patients.

8921. (*Dr. Newsholme.*) Dealing with the last point first, as to England being content to ignore these dreadful diseases, do you think the appointment of a Royal Commission indicates any ignoring of these diseases?—The Royal Commission, I think, was appointed last year.

8922. We are now talking to-day. Is there any present ignoring of these diseases? Is England at the present time content to ignore these diseases?—This is, to my mind, our first move.

8923. You made a statement here that England has been content to ignore them?—Has been. I

think we are beginning to wake up. This Commission is a great point.

8924. The Commission has been appointed within the last year?—That is so.

8925. Before it was appointed the Local Government Board had made investigations on the subject, numerous articles in the medical papers were written, the International Congress of Medicine discussed the matter, and there was a great public uplifting on the subject. Is it quite correct, therefore, to say that England has been quite content to ignore this subject?—May I ask, was it public, or was it not amongst the medical profession?

8926. It was published in the "Times" and many other newspapers. Is not the statement merely an oratorical flourish?—No, that is not so. I do not agree; it was not intended as an oratorical flourish. I do consider that we are behindhand, and that we are only just beginning to wake up.

8927. What experience have you of other countries on which you base that statement?—Owing to our International Congress of Nurses, I have had the opportunity of seeing nurses from many other countries, and of discussing these matters with them, and I also have publications.

8928. And you take their verbal statements to you as an indication that they are much further forward in regard to these diseases than we are in England?—I was just stating that I had publications which show this.

8929. Turning from that point, you were very strong in your opinion that neither doctors nor nurses have been properly educated in regard to these diseases?—That is so.

8930. Will you tell us what education you have had in regard to them?—Yes. My education has been entirely self-education.

8931. It is important that we should know in what ways it has been obtained?—It has been obtained, first of all, by reading. I was older than most women are when I went in for my nursing, therefore, I put two and two together very largely. I began by reading, and then applying my knowledge, and I then set to work to get knowledge from others, both doctors and nurses, on these matters, and again applying it.

8932. So that on the strength of your reading, supplementing your previous knowledge as a nurse, you were able to judge whether doctors and nurses, as a whole, have been sufficiently educated with regard to these diseases?—Not only my reading.

8933. And your previous training as a nurse?—My previous training as a nurse did practically nothing for me.

8934. Where were you trained as a nurse?—Ashton-under-Lyne infirmary.

8935. For how many years did you undergo training?—Three years. I should say that included my midwifery.

8936. Since then you have been a health visitor?—For a time.

8937. For how long were you health visitor at St. Pancras? For a year?—No, not for a year; I cannot tell you exactly; I think it was six months; but there was an interim, and that makes it rather difficult to say. It may have been seven or eight months.

8938. There you worked with Dr. Sykes, the medical officer?—Under Dr. Sykes.

8939. Who did some excellent work on infant mortality?—Yes.

8940. You visited new-born babies and their mothers?—Yes. That is after the midwife left them of course; after eight days.

8941. And in that connection you had an opportunity of giving hygienic advice to the mothers?—Yes.

8942. Supposing you had known of an instance of syphilis in any of those parents or babies, what would you have told the mothers in those cases?—Nothing.

8943. Why would you not have told them?—Because I was informed that by law I had no right to speak.

8944. That was your instruction from the medical officer of health?—No, not from the medical officer of

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health. That was an instruction I had previously received when I had asked a question on the point.

8945. But apart from that legal point, on the merits I gather you would wish to tell every mother when her baby was known to be syphilitic?—May I begin by saying I regard it as the doctor's duty, as it is, to diagnose. It is not my business to diagnose; it is my business to report. If I were fairly certain of it, had I seen such a thing, then I should report.

8946. Supposing that intimation as to syphilis in a baby had to be given, would you give it to the mother or the father?—I think one should give it to both. They are equally responsible.

8947. Supposing by giving it to both you destroy the happiness of that family; would you think yourself free of blame?—It does not seem to me that that is my business at all.

8948. But it may be your business, inasmuch as you are the means of bringing about that result. You cannot rid yourself from the result if you have been the means?—I state I have never done so; but I state I think it is right we should so alter the point of view with regard to these diseases that the thing should necessarily be stated when it occurs. It seems to me the only scientific point of view.

8949. If your scientific point of view leads you to destroy the happiness of that particular family life, do you think you are justified?—To my mind science has nothing to do with the happiness of family life.

8950. That is the view you take?—That is the view I take.

8951. And you say, regardless of consequences, "I will pursue the scientific course"?—I have already said I should leave it out of the question of anything but science.

8952. Then you told us that very interesting case of the wife whom you took from her doctor to another doctor in order that that other doctor might tell her what was the matter?—Yes.

8953. Will you tell us a few more particulars about that?—I was at Oxford at the time, and I had been entertaining a few of our scouts' wives to tea. My uncle was Warden of Merton. I told them I was trying to be their friend in a practical sense.

8954. May I interrupt for one moment. Were you the nurse in charge of that woman at the time?—I was not.

8955. You acted as a friend; not as a nurse?—That woman came to me and said, "Can you tell me the reason of certain ulcers that I have?" I said, "I cannot." She said, "I have asked my doctor, and he refuses to tell me." She said to me, "It seems to me important." I said, "It seems to me important, and if you wish you shall go to a doctor who will tell you. If you ask him the question point blank, he will give you an answer." Under those circumstances I took her to that doctor. I felt the woman had a right to know; I was not sure myself what was the matter.

8956. You were merely acting as a friend of the wife in order to secure better information for her?—Yes.

8957. You say on the first page of your précis that "the prevalence of these diseases is year by year being recognised throughout the scientific world as immeasurably greater than was previously demonstrable." That is a very big statement—"immeasurably greater." Supposing every person and all over the world were suffering from all three venereal diseases, could that not be measured?—I am afraid I do not follow you there.

8958. Would there be any difficulty in measuring a fact which applies to everybody? If there are 100 people involved, it is 100 per cent.?—I say immeasurably greater than was demonstrable previous to the discoveries of Neisser, Schaudinn and Wassermann.

8959. It is merely my objection to the use of the word "immeasurably," which I suggest to you again is an oratorical flourish?—No, I think not.

8960. (*Mrs. Burgwin.*) In answer to the Chairman when he asked you at what age you would begin instruction in sex, you said with very young children. We have had various ages given as young children.

Would you mind telling us what age you really mean by a young child?—I cannot give an age actually because, of course, children differ very much; but as soon as a child begins inquiries, as most children do when the next baby comes, or as soon as they are old enough to realise the next baby coming, I should at once proceed to tell them something.

8961. But supposing the next baby comes when the child is four years of age, say?—If that child asks questions, I should satisfy it according to its age. I am speaking of what has been done.

8962. Do you think in America through these various societies you name, these very young children are being instructed?—They are beginning to be instructed, but only beginning.

8963. You do not think that the present results, as judged by the Divorce Courts of America, are any evidence as to the results of that teaching of young children?—I think not.

8964. You mean it has begun only so recently?—Very recently.

8965. But I understood that some societies have have been going on for 20 years. I am only speaking from what an American lady told me, that they had been teaching children. You do not state how long it has been going on?—The American Society was organised in New York City in February 1905; it is very recent.

8966. Is this the one that you allude to?—The Society for Sanitary and Moral Prophylaxis.

8967. That is in New York?—Yes; and as I understand from my American friends, and as I read, it is from that that a large number of others have sprung up throughout America.

8968. If you had a friend suffering from malignant cancer, and the doctor very likely says, "Yes, your friend is very ill; she has a tumour, I am afraid," would you go and tell that patient that hers was a malignant cancer?—I cannot tell you; it does not seem to me to be on all fours with this, if I may be excused for saying so. It does not commend itself to my mind as being on all fours with this question.

8969. May I put it in another way? Would you tell a woman that she has this particular disease?—Certainly.

8970. That would be a terrible nervous strain to that woman, would it not?—Are we to consider one woman as against the community?

8971. But it is the one case you have to nurse and make well?—Yes.

8972. I am putting myself in the place of the nurse, and I am nursing that woman?—Yes.

8973. Should I tell her something which, in my opinion, as I feel now, would hinder her from getting well?—I am afraid my point of view is that knowledge, as a general rule, is best. There are just a very few exceptions where it is not best; but my view is that as a general rule it is always best. May I say that in dealing with my patients not in these things, because my tongue has been tied, but as a general rule, I find they so respond to knowledge, and it has given them so much confidence, that so far from being bad for them, it has helped them to recover.

8974. You think knowledge is prevention?—It is.

8975. But is it not a fact that with some of the most highly cultured and highly educated people all this knowledge has failed, and failed lamentably?—Failed in what direction?

8976. Despite their knowledge, they have acquired this disease?—It has not come within my own personal knowledge. It may be so; I am not denying it.

8977. (*Sir John Collie.*) You will pardon me if I say I am a little concerned with your views on medical ethics?—I was afraid that would be so.

8978. I shall only ask you one question, but it is a long one. It is a suppositious case on which perhaps you will give me your opinion. A young clerk contracts syphilis, and he is very much mentally disturbed at the result, and puts himself at considerable expense in procuring the best possible treatment. His doctor, after treating him for three years, tells him to wait another year and then marry. His wife escapes, but she takes her first-born child to the doctor for a

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certain rash which has been troubling her for some time. The doctor sees that he can treat the case quite successfully by simply giving the infant certain powders, that no one need know about it, and in fact the child need never have any further symptoms. Medically you may accept this. I have actual experience of many such results. Your idea is that under all circumstances the truth should come out. Under those circumstances, supposing the mother casually remarked, "What is the cause of this rash?" is it the duty of the doctor to say, "Madam! This child has syphilis?" and if she said "I have never had syphilis: where did I get it?" that he should say, "You must have got it from your husband." Do you think that is ethically and morally right; do you think it is just?—I am not dealing either with ethics or with morality in this matter.

8979. Then would you advocate such a course as I suggest?—May I suggest it would appear to me that we are a little confusing the issues.

8980. In what way?—I do not like pronouncing on medical men. You put me in rather a difficulty as a nurse.

8981. Please do not spare us one little bit?—In the first place, may I go a little further back, and say, are all medical men and all syphilologists agreed that that disease is with certainty cured in that infant?

8982. I put a suppositious case to you?—But you must have facts to go upon.

8983. The whole thing is suppositious, the disease, the man, the child, and the whole case?—I am not, naturally, sufficient of a syphilologist to know; but are all doctors agreed that that is a definite cure of the child?

8984. Would you mind taking the case as it stands, and accepting it as a suppositious case?—I am not sure that I have a right to do so.

8985. Then that is your only answer you can give to the suppositions case?—That is the first thing. Then, secondly, are we not going a little outside the matter? I think I said, the woman had a right to the knowledge; but I do not think I have stated yet—I am not sure what I think about it—that she has a right to know how the child got it. Possibly she has that to find out herself; but I said she had a right to the knowledge.

8986. (*Rev. J. Scott Lidgett.*) Do you not think that you have somewhat unfairly simplified the problem by saying you have nothing to do with the ethics?—I think that is for others. Most absolutely you have to treat it from the moral side, but it is not for us professional people.

8987. But we are asking you, not merely as a professional person, but as a woman who has great experience, have not you, not only on the professional and scientific side, but also on the moral aspect of the question?—I must tell you that I am not quite certain where your question is designed to point. Of course hand in hand with professional must also go moral things; but I do not think as a general thing this disease should be looked upon in the first instance from the moral point of view. I do not know how many years it is, but we have been trying to stop these diseases for years, and we have lamentably failed.

8988. But I understand your basal proposition to be that evil is ignorance?—That ignorance tends to evil, certainly.

8989. That is a qualification of your former proposition, is it not?—I am no theologian.

8990. Nor am I for this purpose. In your broad proposition that education is prevention, is contained the assumption that evil is ignorance?—Evil is the daughter of ignorance.

8991. And if you remove ignorance you will destroy evil?—Not absolutely; there are other things.

8992. That is an important qualification which I am glad to have from you; but your general plan for dealing with all this subject in its causes and its effects is, to expose the hard facts of life and let them speak for themselves and take the consequences?—Yes, put from that point of view that is so.

8993. In adopting that policy, you would destroy all reticence and reserve for all ages?—You are bringing it back into the moral point, I think.

8994. Never mind where I am bringing it?—Because I do not hold that it has destroyed all reticence and reserve for all ages.

8995. You say that you would give to a four year old child, as I understand, an accurate answer when the next baby came, to all the questions that child might ask?—I think that was not the answer I made.

8996. Will you make it again then?—I said according to the capacity of that child. I am speaking of what has been actually done with the best results.

8997. I do not doubt it; but I want to comprehend a little more what has been done in the light of what ought to be done?—May I put it quite simply: There are certain laws of nature from my point of view which have been first of all unrecognised in ordinary education, and secondly have been perverted into being sham mysteries.

8998. Then would you sweep away all the general and more or less poetic answers that are given to children when they enquire as to these facts of sexual life?—Storks, and other nonsense I should,

8999. I do not follow you there. We all know that children at a very early age ask questions, and they have been answered in general ways which have satisfied them for the time, without revealing the actual physiological or biological facts of life. Do I understand that you would destroy all those answers?—Yes.

9000. That is what I call destroying all reticence for all ages of life?—To my mind it appears preferable that a child should learn those things from the right person rather than from the wrong person. For instance, I disapprove of a girl of 11, my own particular friend, coming to me and asking me whether I knew how babies were born, and I said no, she then said, "my brother has just come back from school and he has told me all about it." That is what I would destroy.

9001. I understand that not merely would you wait for enquiries and then completely satisfy them, but you would set up a course of teaching beginning with botany?—You could not set up a course of teaching with botany at the age of six. I began by saying when the child's curiosity is stirred, that is the right moment to begin instructing it.

9002. I have a very practical reason for asking these questions, because some of us who have to deal with education administration are brought face to face with some of these new educational methods, and have to pronounce upon them for the purposes of public education. Would you have such courses given in elementary schools, beginning at an early age with botany and going up to sexual relations as they exist between human beings?—Yes.

9003. What is your theory? If I may ask, what relation would a knowledge of botany hold to self-control?—Because by a knowledge of botany the child should be first taught—that is my idea—what is the meaning of sex, and how the sex works. The teaching of self-control will have been working alongside that, and the child will then be taught that the self-control which it has been taught in other matters must be exercised in this matter also.

9004. But that surely would come in at a much more advanced stage. Do you rely for the destruction of these diseases by educational methods upon what you may call scientific knowledge, or upon moral instruction and influence?—Both; but moral instruction and influence have been tried alone, and to my mind have failed, and we have now got to find something else to work with.

9005. Has not the other side, the scientific instruction, been tried by itself alone and failed?—I do not know.

9006. I take it then you desire some system which combines them?—I may emphasise the point of view of knowledge, because that seems to me the side that requires emphasising. The moral side is already working. It is being worked by our clergy; it is being worked by mothers and fathers, and it is being worked

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by educationalists, but, practically speaking, the other side has not been touched at all yet.

9007. Do you think the moral side has ever been worked for all it is worth?—May I give you an instance? Nothing can exceed the beautiful work done by our rescue workers, but our rescue workers themselves have been known to infect girls because they did not know, and they put them into beds that had been occupied by other girls who have been already infected. All those things have happened; and therefore knowledge is the first thing.

9008. I think we should all agree that knowledge of the deadliness of these diseases is necessary to begin with. You spoke of an admirable series of books?—Yes.

(Rev. J. Scott Lidgett.) Can you give me the titles of those books?

(Chairman.) I am inclined to think that this witness's knowledge extends rather to nursing than to education.

(Rev. J. Scott Lidgett.) I thought, my lord, I was rather following your lead in emphasizing the educational view.

(Chairman.) Perhaps I have gone further than I ought to have done. It seems to me, however, that we have not a witness here who is engaged in practical educational work, but is engaged in nursing.

9009. (Rev. J. Scott Lidgett.) That is rather what I thought, with great respect, when she first came, but the subsequent course of the examination has so emphasized these aspects that are brought with great prominence before us by a school of thought to which I think the witness belongs, that I was anxious to know all about them. But I think this question is upon the scientific point of view, as to the series of books which are put into the hands of the witness and others?—There is a very good series issued by the Society of Moral and Sanitary Prophylaxis, in America; I am afraid beyond those I cannot, without reference, give you the names of the other books, but there are a considerable number now. But I may say all of them have been produced within quite recent years.

9010. Are you aware that a great many of these books are written without very competent scientific knowledge? I do not say this series, but I mean books of this class?—I do not desire that any books of this class should be written without scientific knowledge. I should be very sorry that they should be.

9011. Then what do you mean by altering the point of view in regard to these diseases? Do you mean simply for the purposes of treatment, or do you wish to alter the point of view in regard to the acts that generally give rise to them?—I desire to alter the point of view in this respect; that no longer should it be held that the innocent—and there are very many of them suffering from these diseases—should have a difficulty in being treated because these diseases are shameful. They must cease to be described as shameful.

9012. That is the limit of what you intend us to understand?—That is what I intended.

9013. (Canon Horsley.) Dr. Lidgett has gone over a great deal of what I wanted to ask you; but there are one or two expressions in your précis which might easily have led to your being misunderstood?—May I say I wrote it hurriedly, because I was not expecting to send a detailed précis.

9014. Quite at the beginning you say, venereal disease is not the result of a moral lapse. Of course in most cases it is?—I say, "It is time that venereal disease" should at length be recognised and treated simply "for what it is—not the result of a moral lapse, which in a large number of cases it is not, on the part of the patient."

9015. You say it might be taken that venereal disease is not the result of a moral lapse in a large number of cases; but syphilis insontium is not so common as ordinary syphilis, is it?—I am afraid I doubt that very much from what I have heard from syphilologists.

9016. The sort of average that has been given to it is at the outside 25 per cent. of innocent cases. Is

it not more than that—not the majority?—Would Fournier say that?

9017. You do not deny that in a great many cases the disease is the result of moral lapse?—Obviously.

9018. On the ninth line of the first page of your précis you speak about sentimental prudery, and then later on on the same page you speak of the same thing as pruriency? How would you justify that expression?—Because by withholding knowledge you make people curious. You would call that prurient curiosity, would you not?

9019. No. Knowing nothing about a disease does not make them want to learn about it?—But I think it is the suspicion, especially in young people.

9020. I do not quite follow you there?—I am sorry if I have not made it plain.

9021. Then there is one thing you said with which I largely agree: that is, that the woman had a right to know whatever the disease was. That is not quite the same thing as the doctor having the duty to tell. One does not quite connote the other, does it? If the woman asked the doctor: "Have I got cancer?", she has the right to know; but is there also a duty on the doctor to tell?—Personally I should feel that. I give it as my personal opinion.

9022. One does not depend on the other necessarily, does it?—I think so.

9023. Then with regard to nurses being exposed to infection, that is the case at the present moment in large children's hospitals, especially in the out-patients departments, that nurses are not sufficiently instructed how to avoid infection?—That is so.

9024. And they do not have appliances given to them to treat them?—That is so.

9025. I know that from nurses themselves, and of course that is a thing that ought to be remedied?—Yes.

9026. Then with regard to the segregation of certain classes, of course the feeble-minded produce an enormous amount of disease and misery of all kinds?—Yes.

9027. I should not myself put habitual alcoholics in quite the same category, because they do not have children at the rate the feeble-minded do, for example?—No. I speak under correction; but is it not known that in a state of alcoholism—

9028. Yes, but that is hardly the habitual alcoholic. There is the man who gets drunk, the habitual alcoholic, and the dipsomaniac. They are different classes?—But would not the man who gets drunk every night be a habitual alcoholic?

9029. I should put the feeble-minded in an entirely different class. Then there is another class, it seems to me you ought to have included, and that is habitual tramps, of which there are probably about 100,000 in England, who are an extremely difficult class, and great disseminators of diseases of all kinds?—Yes, they are.

9030. I think if anyone should be segregated, they should. First of all feeble-minded, then tramps, and then alcoholics?—If the tramp is diseased. I do not mean if the feeble-minded is diseased. I mean the feeble-minded *qua* feeble-minded.

9031. Then with regard to the instruction given to nurses, is it not of primary importance that it should be given to midwives, to begin with?—Yes.

9032. It does seem to me absolutely necessary that midwives should be instructed?—It is. I ought to have inserted midwives.

9033. My daughter was a nurse for a while. She had nothing whatever to do with midwifery, and never would have had. It is not so necessary that she should know it if she were not going to be a midwife?—I think it is necessary that all nurses should.

9034. No; not if she does not come across a case possibly. At any rate a midwife should?—I consider both. I meant to have inserted midwives, and I am sorry I have not done so.

9035. With regard to the American society, which is an extremely interesting one, I think we have the same societies under other names. You called it the "Society for Moral and Sanitary Prophylaxis," but in your paper you call it "Sanitary and Moral Prophylaxis."

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laxis." Which comes first in their minds? The name covers a great deal?—It is the "Society for Sanitary and Moral Prophylaxis."

9036. "Moral" comes second?—Yes. I do not know that it does in their estimation; but it does in their title.

(*Canon Horsley.*) You would put in your title the thing which you think most of. If it were "Moral and Sanitary Prophylaxis," I should expect more from it than as it is "Sanitary and Moral."

9037. (*Dr. Mott.*) Have you heard of instances of a midwife being infected and spreading the disease by a sore on the finger?—I cannot tell you whether she spread this disease by the sore on the finger—whether that was the disease she spread; but although I could not give the definite facts—I mean I could not give you references—I have distinctly heard of a midwife being infected.

9038. I mean from want of knowledge, if she had a sore on the finger she would spread the disease?—Yes.

9039. Cases have been recorded. Then you said no woman in the hospital knows the nature of her disease? Did I say no woman?

9040. I thought you said so, on her discharge?—I said as far as I knew.

9041. That is your experience?—I was definitely told by the medical men that it was their practice not to tell them.

9042. But I gather you would approve, would you not, that in private practice, if a woman came to a doctor and she asked definitely to know the nature of her disease, he should tell her and leave her to find out how she caught the disease?—Yes.

9043. That is your position?—Yes.

9044. You do not think the doctor under any circumstances would judge that it would be inadvisable to tell her if he had treated her successfully. I mean supposing he knew he had treated her and cured her, and therefore any likelihood of her having diseased children had been prevented, do you think it would be wise in every case to tell her then?—But may I there again go back on the question: is every syphilologist at one as regards the question of cure; because a great deal depends upon that, does it not?

9045. Yes; but you know what Sir Jonathan Hutchinson said about it, and you will admit he was a great authority?—He was a great authority.

9046. He said it was the most hopeful element of therapeutics, the treatment of syphilitic children, provided they were treated satisfactorily; and Sir Thomas Barlow gave similar evidence the other day?—Yes; but is it a certainty? I speak, of course, only as a nurse.

9047. It is as certain as we can say. It is a very curable disease in children if it is properly treated; that I can assure you. Mr. Lane would know more than I do about it. I quite recognise your position with regard to the ethics of the question; but I think the doctor must exercise his judgment at the same time as to whether it would be advisable to break up the home if he felt sure he had cured the mother. Then with regard to nurses knowing the nature of the disease, would you approve of masseuses in a hospital refusing to massage nervous cases because the patients had suffered once from venereal disease?—I do not quite follow. Are you differentiating between masseuses and nurses, may I ask?

9048. I am asking you the question?—But a masseuse is not necessarily a nurse.

9049. Still they are professional women, and you are representing professional women?—I represent nurses.

9050. Would you not say that you represent professional women?—I do not represent masseuses, because I do not know sufficient about masseuses to represent them.

9051. That actually occurred in my practice at the hospital?—Let me say this. As regards a nurse, I do not consider she has a right to refuse to do anything whatever. Her duty is to her patient; but as regards the masseuses, I am not here to speak.

9052. You would not answer?—No.

9053. Then you referred to sterilisation of feeble-minded people in the States. Did I gather you approved of that?—I distinctly stated to the chairman that I gave no opinion on the matter. I merely said there were people who had gone a great deal further than ourselves, and it was in that direction. I am not stating whether I approve or disapprove. I have not made up my mind.

9054. In many of the States they have forgotten it, as they express it when they do not carry a thing out in practice. It has been passed in a number of States; but there are only one or two where they actually practised it, and they have not thought it advisable to carry it out?—I could not express an opinion, and I have not any opinion to express on that.

9055. You referred to confidential notification?—For the present only.

9056. Do you think that would prevent a number of people coming to the hospital and clinics where the disease could be treated, if they felt they would be notified?—If I may put it from another point of view; it appears to me that so few comparatively do come that we should have to put up with that in the beginning for the sake of the advantages later on.

9057. Then in the interest of the individual and the State, do you not think it desirable that herbalists, chemists and quacks of all descriptions should be prevented from treating these diseases?—Absolutely. They should only be treated by authorised medical men. You will please understand that I do not consider a nurse has any business with it. It is not for her to treat.

9058. I am not referring to nurses. Otherwise you see notification would drive more patients to the unqualified?—Yes.

9059. But if that were introduced, it would tend to assist in confidential notification?—Certainly.

9060. Would you recommend that every patient who attended a clinic for the purpose of receiving treatment should have a card given to him, and on the card a statement of the nature of the disease and how long he should remain under treatment, the probability of cure and the dangers of infection?—Yes, I do.

9061. That is practised in Hamburg, and it is practised at the Lock Hospital and some other hospitals?—Yes, and I think at the Glasgow Lock also.

9062. Would you recommend in various cities a municipal establishment for free diagnosis for panel doctors?—May I say, as far as possible I would try and let it be worked in with the ordinary hospital work. I think that would tend more to help than anything.

9063. You would approve of general hospitals rather than the establishment of municipal establishments?—Yes.

9064. (*Dr. Scharlieb.*) Do I understand that you think it is a nurse's duty to tell a patient the nature of the disease?—Do you mean, may I ask, where the doctor refuses to do so?

9065. Supposing I were the doctor in a case, and you were the nurse, and I knew the patient had this disease but I did not tell her. Is it your duty to tell her?—May I answer that by my practice. I have not done so.

9066. I think that is a very good answer, because it appears to me it is not the nurse's duty to give a patient information that is withheld for some reason which the doctor does not communicate to the nurse. Is it not perhaps a doctor's responsibility?—May I say that seems to me a very minor point in this very big subject.

9067. Of course; but it seems to me it is the doctor's duty, and that probably it would be wiser to leave it for the doctor to do it in the time and in the manner that seems wisest and best to him, and not for the nurse to take it upon herself?—May I say I have been speaking of broad principles rather than on this kind of smaller details.

9068. (*Mrs. Creighton.*) Would the nurse in the ordinary hospital training now have any teaching about these diseases, so far as you know?—In some of the hospitals she would, and in others she would not.

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9069. There are hospitals where she would learn nothing?—I am afraid so. I may say definitely, yes.

9070. Are there maternity hospitals where she could go through her maternity and midwifery training and learn nothing about these diseases?—Nothing, or next to nothing. I cannot answer for all hospitals, because I am not acquainted with all hospitals.

9071. But there are some in which that would be the case?—I am afraid so.

9072. Then would nurses who are nursing in a private home and are nursing a syphilitic man be invariably told by the medical man in attendance of the risk of infection?—No.

9073. You have known yourself cases where they were not told?—I have.

9074. Many cases?—I am afraid my answer to that must be that in speaking of it amongst ourselves we have assumed it simply because it has been so often the case rather than that I have a great number of individual cases to speak of.

9075. You mean it is an opinion held by nurses in common that it may happen frequently in a private nursing home that a nurse will be called to a syphilitic patient without being told he was so?—I am afraid I must qualify that. A great many of the nurses would not know they were nursing a syphilitic case, and, therefore, could not even tell you that they have been nursing a syphilitic case, without being informed. A great many of our nurses are absolutely ignorant. They do not know the signs and they do not know the results.

9076. So that I mean it is a common opinion amongst the nurses who think about their profession that it does happen in nursing homes that nurses are called upon to nurse syphilitic patients without being told of the precautions they should take?—Yes. You would not find every nurse would agree with me in this. I am speaking for the more forward party amongst the nurses.

9077. Have you any experience of district nursing?—A little; but it has been in Dublin, where, of course, we have got a certain amount of it, and in the district where I am now we hardly ever hear of such a thing, I am happy to say.

9078. Then would your opinion be that district nurses were left in as great ignorance as other nurses?—That would depend entirely on how they were trained, and where.

9079. But you would not be surprised to find district nurses who were quite ignorant?—I should not be surprised at all.

9080. Have you known personally many cases of infection in nurses?—Not amongst my own friends, but they have told me of others.

9081. We always hear indirectly about it; that others know of cases. Can you suggest any means by which we could arrive at facts as to the number of such infections?—No, I am afraid I could not.

(*Mr. Lane.*) I have no question.

(*Mr. Malcolm Morris.*) I have no question.

9082. (*Sir Almeric Fitzroy.*) Are we to understand that the Central Midwives' Board makes no provision

for the instruction of midwives on these subjects?—I cannot answer that absolutely definitely; but I am unaware of it.

9083. You think they ought to be urged to do so?—I do.

9084. (*Sir Kenelm Digby.*) I think you have had a great deal of experience in Ireland, have you not?—My experience during the last five years has been in Ireland; I took my midwifery in Ireland, but my general training and my poor law work were in England.

9085. Have you had large experience of the prevalence of these diseases in Ireland?—In our rural district where I live they are very very rare.

9086. That is in accordance with the evidence we have already had. That is in the north of Ireland, is it?—In the south—Kerry.

9087. There is a great absence of the disease in Kerry?—I am afraid in some of the small towns you get it, but I am entirely in a rural part, 24 miles from a town, and we hardly ever hear of such a thing.

9088. That is quite in accordance with what other witnesses have told us. Have you had any experience in Dublin or Belfast itself?—At the Rotunda, as a district midwife going out.

9089. I am afraid Dublin is very bad?—I am afraid so.

9090. It seems a paradox, but do you think that is at all due to the absence of the disease in other parts of Ireland? I mean if a young woman goes wrong in Kerry she has considerable difficulty in getting back to her home, has she not, the sentiment is so strong against it?—The point is that as a rule we hardly ever get a girl going wrong, and if she does the priest insists on marriage.

9091. I remember being in Ireland a few years ago and an inspector of the Poor Law Board was on the same inquiry. He pointed out a workhouse and said: "That workhouse is full of girls from Kerry; we cannot get them to go home." I have also heard that girls of that kind drift to Dublin?—That, of course, is possible, but it has not come within my knowledge.

9092. You spoke of a doctor telling a nurse he was legally bound not to disclose the disease which the patient had. Are you sure of the facts there? Did he really say he was legally bound?—He held himself to be legally bound.

9093. Perhaps it is not right to ask you a question of law, but you do not know on what ground, do you? Was it libel or slander, or what?—It would be slander, would it not?

9094. He really gave that reason?—He did; and what is more, I have heard it from other medical men besides the man who actually said that to me.

9095. Not medical etiquette or anything of that sort, but an actual legal obligation?—Yes; I do not know whether it is true. I am not giving it as a fact that it is so, but merely I have been so informed.

(*Chairman.*) Thank you.

(*Witness.*) May I thank you for the patience with which you have listened to me. I do not desire to speak dogmatically.

The witness withdrew.

Miss GARRETT called and examined. Miss KINNAIRD accompanied Miss Garrett.

9096. (*Chairman.*) Miss Garrett, you have been matron of the hospital for women and children for 13 years?—Yes.

9097. I understand, Miss Kinnaird, you may wish to answer some questions?—(*Miss Kinnaird.*) I will answer anything I know or correct anything; but I did not come for the purpose of answering questions.

9098. (*Mrs. Creighton.*) The Chairman has been good enough to allow me to begin, as I have to go. I gather from your figures that the character of the patients at the Lock Hospital has changed very much of late years?—(*Miss Garrett.*) Yes.

9099. And you imagine that you get far fewer women straight off the streets than you did?—Yes, very much fewer.

9100. The majority of the women that come to you are really now sent from rescue homes, you say?—Not the majority, but a great number.

9101. Have you, yourself, any explanation to offer for this change?—One reason is that the church is very active now in rescue work. They are out in the streets all the time.

9102. You think it comes because there is more rescue work being done?—I think so.

9103. Not because the women on the streets are shy about coming to the hospital?—I think they used to be more so than they are now.

9104. You do not think they are getting more shy about coming to the hospital?—No, I do not think so. They are coming much more freely and much more willingly.

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[Continued.]

9105. You think they are coming more willingly now?—I know they are.

9106. Can you suggest to us any means by which we can get the prostitute to come more willingly still for treatment?—I do not think that as a class we have so many of those people.

9107. You do not have many?—I do not think so.

9108. Have you been able to find in talking to those you may have taken in what they do when they find themselves to have the disease?—We get them all now in a very primary stage. We have none of the old cases now. They come to the hospital in the primary stage.

9109. What do you think the old cases do? Have you no means of knowing?—No. (*Miss Kinnaird.*) Yes, you think they are treated by the unions now and not sent to us. The union cases are so much younger than they used to be. They used to be very old people. (*Miss Garrett.*) Yes. (*Miss Kinnaird.*) We do not know the reason, but that is the fact. We think, perhaps they are treating the older ones.

9110. The point I am anxious to get at is what we can do to get these women to come for treatment, and if we can find out what is keeping them back and whether they go to quacks. I do not know whether Miss Garrett in her talks with them has arrived at any opinion?—(*Miss Garrett.*) We have only one prostitute now who has been to a quack.

9111. Then another point about the girls from rescue homes. They are sent to you from the rescue homes?—Yes.

9112. What time do you take to be necessary for cure before they are sent out?—The average time now is four to six months. They have their full course of "606."

9113. Of course you keep some of them in your own home?—Very few.

9114. If they are sent into your own home, the treatment is continued?—The treatment is continued all the time they are in the home.

9115. If they are sent back to the home which originally sent them, do you send directions with the treatment?—Yes, we send directions.

9116. In every case?—Yes. We have a certificate stating what treatment will be required.

9117. Have you any knowledge as to how far those directions are carried out?—No.

9118. Is there any arrangement by which those sent to rescue homes can come up at intervals and be inspected again?—We have asked that they should be allowed to come, say once a week to see us; but the rescuers say they cannot do that.

9119. Have you no case in which that is done?—No.

9120. And you think that is most desirable?—Most desirable.

9121. Then as regards the rescue workers themselves having some knowledge of this matter; have you ever had rescue workers coming to get a little training at the hospital?—Yes, a few.

9122. Would there be facilities for their coming?—Yes, there are.

9123. Because I have heard it stated that you will not admit them?—I think the doctor said it was no use anybody coming for a shorter period than three months.

9124. You would not take them for under three months?—No; so the medical men have said.

9125. That is the rule at present?—Yes.

9126. But you would take anyone for three months?—For three months at a guinea a week.

9127. That would cover all expenses?—Yes, laundry and everything.

9128. That, of course, is a very prohibitive fee for many; but we must not ask you about that as you have not the management in that matter. Have you had any serious difficulties with regard to discipline in the hospital?—Not lately; not for the last few years.

9129. But you did in the beginning of your time?—We had a different type of girl and they have passed away now.

9130. Have you any explanation yourself to give as to why there is this change in the type of girl you receive?—We used to receive a great number of patients from Woolwich, Aldershot, Chatham and Chelsea, but we do not receive those patients now.

9131. Do you know where they go?—I do not know.

9132. I am sure the medical men here would wish you to answer this question frankly. Have you yourself any feeling that you would rather have women amongst your hospital physicians or not?—I am beginning to feel I would like lady doctors now.

9133. Have you ever seen the Lock Hospital in Glasgow?—No, never.

(*Mrs. Creighton.*) I gather there is a woman doctor there now. That is all, Mr. Chairman.

9134. (*Chairman.*) The number of patients in your hospital seems to have decreased greatly. I understand from what you said to Mrs. Creighton, you cannot explain this falling off of numbers?—I cannot explain it except that we do not get all those patients we used to get from these towns and seaport places such as Aldershot and Chatham; they have practically passed away.

9135. You do not know where those cases go to now?—I do not know.

9136. You say the change of the name of the hospital has done much good in getting rid of prejudice?—I think so.

9137. All the same your numbers have dropped?—We shall not be able to say that at the end of this year. On one floor alone, the London floor, we have received 65 patients since the 1st January, and that has been unknown for very many years in the hospital. 31 came from Dean Street for "606," but the others came for other reasons of their own freely.

9138. That is very curious. It looks as if there was going to be another wave of people coming to you for some reason?—It seems so.

9139. What class are they?—We get some shop girls and a large majority of them are very young servants and very often a girl in a music hall. It is a much better class and much younger. The average age in the hospital now is 20 years and there are very many children between the ages of 5 and 15.

9140. Have these 60 mostly come through the agency of rescue workers?—No.

9141. All these have come of their own accord?—Some have come from rescue workers, but the greater number have come of their own accord. Many are sent by doctors.

9142. Do you know how those women came to know that they were diseased? Had they been to consult anyone before they came to you?—I do not think so. I think they seemed to realise it themselves.

9143. To realise their danger?—Yes, I think so.

9144. I see you say you think the professional prostitute does not feel any responsibility about spreading the disease?—No, none whatever; but we have had them.

9145. But has she any regard for her own danger in going on?—Very little. I do not think she thinks anything about it.

9146. They do not realise their own danger by not getting treatment?—No, not at all.

9147. You say you think recourse to quacks is not so frequent as it used to be. Have you any reasons to give for that opinion?—No; my experience is confined to the hospital wholly.

9148. Does that mean that women who now come to the hospital have not gone to quacks previously as much as they used to do?—No, not in my experience in the hospital.

9149. Then you depend largely for filling your hospital upon the girls the rescue workers send you?—Not wholly.

9150. Not wholly, but largely. Do these rescue workers find out the signs of the disease in these girls?—Sometimes the girl will be in the home for a month or two weeks, and it will not be discovered that she is suffering from disease. Then they find something amiss and they send for the medical man and he sends her at once to the hospital.

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[Continued.]

9151. Will these girls stay with you until the cure is completed?—They stay until the surgeons say they are no longer infectious to others.

9152. And you keep them?—Yes.

9153. Have you no difficulty on their account in keeping them?—No difficulty whatever.

9154. They are quite willing to stay?—They are quite willing to stay.

9155. You say that occupation is found for the girls in your hospital in educational classes. What do you mean by that quite? Do you give them teaching in classes?—We have teachers coming now. It is in order to give the girls a healthy occupation for their minds.

9156. And they are taught in classes?—Yes.

9157. Then when you send a girl of the domestic servant type at the end of the hospital time into service or something like that and in cases you do do that, you can still get her to come to hospital and take her treatment?—Yes, she is encouraged to come for treatment.

9158. But will she come?—She does come.

9159. You say other girls leaving the hospital and going to situations return to the out-patient department for treatment?—Yes, they come for out-door treatment. We encourage them to do so. They go out and find situations for themselves.

9160. Do they do so regularly?—Yes, they do so regularly. If a girl cannot come on a certain evening, we encourage her to come when she is out for the evening. She is always seen then.

9161. That means you have impressed upon them during their stay in the hospital the dangers of the disease?—Yes, we have.

9162. To such an extent that they are willing to come back and go on with the treatment?—Yes; we impress upon them that they must have three years' treatment.

9163. I suppose you do not give them any printed notices of any sort, but you do it orally?—No, we give them none.

9164. Do you think it would be a good thing that every girl who attends your hospital should have a printed statement given to her?—We used to have that, but now we have got a notice to that effect in the out-patients waiting room, as to the precautions to be taken against syphilis and warnings.

9165. Now I come to the girls who are brought by the rescue workers. When those girls go back with the rescue workers, are they informed of the precise state of the disease in which they find themselves?—We give a medical certificate which is marked "Private and Confidential" to the worker, telling her what will be necessary for the girl, and we give them some mercury pills. The rule is to give 100 mercury pills in a box with instructions that she must take them under the case of a medical man outside in connection with the home.

9166. But those girls do not come back to you as regularly as the other ones do?—No.

9167. I understand from you in every case the rescue worker knows the state of the girl and what treatment she still requires?—Yes, she knows that. We always tell them.

9168. Do you think the rescue homes should be so organised as to be capable of going on with the treatment?—I think they ought to be, but they say it is quite impossible.

9169. You think it would be impossible?—The homes say it is quite impossible.

9170. Is it impossible for the girls in the rescue homes still to come into your out-patient department?—Do you mean our own rescue homes?

9171. No, I am talking now about the other rescue homes?—We have impressed upon them the necessity of the girl coming up once a month to be seen by the surgeon. They seem to think it is not possible.

9172. They cannot bring pressure enough to bear upon girls to make them do it?—No. I do not think they realise the great danger or the great necessity. (Miss Kinnaird.) I do not think it is that, if I may say so. I think it is the difficulty of the expense really of sending them to and fro. It is a long distance, it

takes a long time, and it wants a matron. They cannot be trusted alone. I think they would come to a bedroom in the homes. I do not think they would object then. I think you can see that that is the difficulty.

9173. If the hospital had an out-patient department for treatment, there would be no difficulty in getting these girls to come from the rescue homes a short distance. It is all a question of distance?—Then there is the question of waiting in a big hospital, which is almost as bad. I mean it takes away a whole half day from a worker. You would have to keep extra workers. That is the long and short of it.

9174. You seem to think that a special hospital is better than arrangements in general hospitals. Will you tell us why, because we have had a great deal of evidence in an opposite sense?—(Miss Garrett.) With regard to a general hospital, I feel it would be unsatisfactory, as she would be a source of danger all the time. Although she is coming for her treatment, there is nobody to supervise the girl in any way, to see how she is living outside. I do not see how you can do it better than a special hospital.

9175. Other witnesses have said so; but do you think it is possible to set up lock hospitals everywhere, or that the line on which treatment must go is the extension of facilities in ordinary hospitals? You think that lock hospitals only treating these diseases is the best?—Yes, I feel so most strongly.

9176. I suppose all your nurses are thoroughly instructed as to any risk they may run?—Yes, they all wear gloves.

9177. Turning to your table, I see in the table of patients for the years, there is a very marked reduction in '20 years, but you say this year may alter the balance on account of the large number you are taking now?—It seems so already. In two months' time there has been a very marked increase.

9178. In the second column "no occupation"—by which I suppose you mean women who are not dependent on earning a livelihood—there is an enormous reduction, from 546 in 1893 to 18 in the last completed year, 1912. That is enormous?—Yes, it is.

9179. Have you no explanation of the dropping off of that class of people?—No, I think they are so very much younger. Some of the girls we have now have only been doing wrong for a few months; one girl only two weeks. It is sometimes only a few weeks or months. It is not years, like we used to have. When I came to the hospital it used to be seven and nine years.

9180. Taking the 18 with no occupation that you return for 1912, may we assume that all the other girls except those 18 were leading an immoral life?—No.

9181. They were merely young girls who got into trouble?—Yes; in some cases they are brought by their mistresses to the hospital.

9182. Then generally speaking I see there has been a considerable increase in the number of girls you get from rescue homes. I suppose that means the developing of the rescue work during these last 20 years?—Yes.

9183. And in the number that pass to your home from the hospital there seems to be a considerable reduction. Why is your home less used than it used to be?—They are so much longer in the hospital for one reason. Then the girl knows that she can find work outside if she is no longer infectious, and she wants to go out and find work for herself and come back to the hospital as an out-patient.

9184. I suppose the majority of the girls who attend your hospital are acquired cases?—Yes. We have some not.

9185. Have you any very young children suffering from the disease in a gentle form?—We have the babies.

9186. You have those as well?—Yes.

9187. And in those cases of the babies are the parents informed?—Yes, they are.

9188. They are all informed of the cause?—Yes, quite. They come to the hospital to visit the children.

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[Continued.]

9189. You could not give us any idea of separate figures of gonorrhœa and syphilis, could you?—I could not.

9190. I suppose they are all included in this?—Yes.

9191. Have you many cases in which both diseases are combined in one patient?—I do not think so very many. I do not know.

9192. Then we may take it that all the girls who are not sent to you from rescue workers come there of their own accord?—The majority. We have one floor where we receive all union cases. They are sent by the guardians of unions.

9193. The guardians send some, do they?—Yes, on floor 2. The age is quite young. We used to have older women, say about 40, and now they are 20 and 22.

9194. Do you find these young girls who come to you are generally quite ignorant of the nature of the risks they have run?—I think they are ignorant.

9195. And you think that more knowledge among that class which seems to provide you with so many inmates, would lead to a great decrease in infection?—I think I could hardly answer that question.

9196. In your nursing experience, do you come across many cases of what is called innocent infection?—Yes, we do.

9197. Very many?—We have four at present, and we have had more, where the lip has been infected by a kiss. We have two such cases now of two young girls.

9198. Speaking generally, do girls tell you or tell the nurses how they acquired this disease?—We do not encourage that at all. It is against the principles of the hospital to ask any questions about a girl's past life. She is with us and that is sufficient. We do not encourage or allow any talk.

9199. I suppose where innocent infection has been incurred they tell you?—Yes, the doctors will know it.

9200. (*Sir Almeric Fitzroy.*) What is the youngest age in your experience at which cases of acquired syphilis or gonorrhœa occur?—Four and five.

9201. Am I right in supposing that your position has given you a considerable insight into rescue work?—Yes.

9202. Was your attention called to a statement made the other day by Judge Rentoul, in summing up a case of attempted procuration, in which he said: "We are told that there is hardly such a thing as succeeding in rescue work." Is that your experience?—No.

9203. Do you think that is an entirely erroneous view?—Yes, entirely, with regard to rescue work in London.

9204. (*Sir Malcolm Morris.*) Do you think the fact that there is a larger number coming now to the hospital is due to the fact that there has been a greater publicity on the subject during the last few months in the press and so forth?—I think so. We think that in the hospital.

9205. Have you heard of girls having read it in the papers, and so on?—No; but I think girls tell one another.

9206. You do?—Yes.

9207. Do you think that has induced them to come earlier for treatment?—I could not tell you.

9208. You said yourself they came at a very much earlier age?—Yes.

9209. You said they were sometimes only infected for a few days even?—Yes.

9210. So, therefore, they do come earlier for treatment than they used to?—Yes.

9211. That you would agree to?—Undoubtedly.

9212. Do you think it is in consequence of this publicity that they come?—I think it has been very helpful. In many cases their mothers bring them. (*Miss Kinnaird.*) The change has been very gradual. It cannot all be due to that, because it is a slow change which has been going on for the past 10 years.

9213. Yes, but the last two months has not been a slow change?—No. That has probably been the result of this. (*Miss Garrett.*) Then there is a printed form in Dean Street for all the women who attend the

out-patients department to see, telling them how they may get "606."

9214. Is there any objection to carrying out that treatment?—No.

9215. There is no difficulty at all?—No difficulty at all.

9216. Have you yourself ever seen any disastrous effects from it?—No.

9217. None?—No.

9218. You see the beneficial results yourself?—Yes, quite.

9219. (*Mr. Lane.*) I wanted to ask about the educational classes. Could you give us some idea of their scope? What subjects are they educated in?—We have classes every day except Saturday.

9220. Of what nature?—They have reading and arithmetic. Their education is continued. The girls are very young. They also have musical drill, singing classes, needlework, and sewing.

9221. This is comparatively recent?—Three years.

9222. Who are the teachers provided by?—By the London County Council.

9223. It is part of their education scheme?—Yes.

9224. And the girls rather welcome it?—Yes, it is a very good thing for the girls.

9225. With regard to the out-patients department, is there a complete out-patients department now in the Harrow Road Branch?—No, we have not the accommodation.

9226. Then you only see the cases that have been in the hospital?—We see those that come from Dean Street, and there are some cases of young shop girls who come to inquire if they can have treatment with us.

9227. And they can receive treatment?—They can receive it.

9228. And with better accommodation the out-patients department might be entirely removed to the Harrow Road?—We are not prepared for that.

9229. But if the accommodation were there?—Yes, if we had the accommodation.

9230. It would be a better method to keep all these women to one institution than to have them go as out-patients to the male hospital in Dean Street once a week?—Yes.

9231. It was mentioned that you had a number of young children in, and that many of them had acquired syphilis at a very early age?—Yes.

9232. Have you any explanation of that?—None. I do not know how it has been acquired.

9233. But you have no doubt heard of the tradition that exists, that the disease can be passed on from an infected subject to an innocent child?—Yes.

9234. That is the explanation of most of these cases?—I think the little children have been sinned against in every instance we have got.

9235. In every instance of acquired syphilis?—Yes, so the surgeons have said.

9236. Then as to the class of nurse, do you have any difficulty in getting efficient nurses?—There is no difficulty in getting a hospital trained sister; but I have a difficulty in getting young probationers, because they are afraid. The name "Lock" was a great hindrance.

9237. Have you found that the change of the name of the hospital has made any difference in the class of the nurses you get?—I think so.

9238. Do you get any people coming to your hospital specially for training in the subject of venereal diseases?—No, not yet.

9239. Not those who are going in for rescue work abroad?—Some years ago we had ladies for two or three months who wished to go abroad and open rescue homes in Australia and New Zealand. We have many workers come to make inquiries.

9240. But you find recently the girls have come willingly from Dean Street for these injections of salvarsan?—Quite willingly. They prefer to come.

9241. And they ask for them?—They come.

9242. Then as regards the period of stay in hospital, about how long do the girls remain in?—Until the house surgeon discharges them. They do not take

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their own discharge now as they used to. They remain in and finish their treatment.

9243. That would account to some extent for the falling off in numbers. In 1893 you have 736, and in 1912 you have 340. One reason for the diminution in the number of patients, you say, is their longer stay in the hospital?—Yes.

9244. Because in the year 1893 you had a large number of women from garrison towns, such as Aldershot and Woolwich, as you mentioned?—Yes.

9245. Really a relic of the Contagious Diseases Act. You were not at the hospital when the Contagious Diseases Act was in force?—No.

9246. Still, the women came up from these garrison towns for some years afterwards?—Yes, they did.

9247. These girls in 1893 and in the first part of this list were of a class who left the hospital directly they were free of symptoms?—Yes, sometimes. They did not remain for a long course of treatment but just for a few weeks, and they took their discharge and went back.

9248. There was a difficulty in retaining them?—Yes, they were much older women.

9249. Could you give us the number of persons at present in the hospital, roughly speaking?—One patient slept on the floor last night. There are 40 in the Cambridge, 60 in the London, 21 in the Kinnaird, and 21 in the Nursery.

9250. How many does that amount to?—(Miss Kinnaird.) There are about 100, and about 19 children.

9251. Then there are 119 patients in the hospital altogether?—Yes.

9252. And how many in the rescue home?—39 or 40.

9253. (Sir Malcolm Morris.) I wish to ask a question I forgot just now. Why was the name changed?—The Ladies' Committee sent an appeal to the Board.

9254. When?—Four years ago.

9255. It has been four years under this name?—Yes.

9256. Has any practical disadvantage arisen from the fact that it has been called the hospital for women and children? Do people apply for ordinary diseases?—No; they all know what the hospital is for.

9257. You mean from the fact of its having previously been called the "Lock." The knowledge has not yet died out?—No.

9258. But some time or another it will die out, and other people will come. When they apply there, who would tell them what the hospital is for; because the outside public could form no idea of a hospital for women and children. I mean there are several hospitals for women and children?—It used to be called the "Westbourne Green Hospital," and on our laws it is still called the "Westbourne Green Hospital."

9259. That is not my point. Supposing a woman with an ordinary disease of any sort, nothing venereal, came and said: "I see this is a hospital for women and children; will you take me in," what would happen to her?—(Miss Kinnaird.) The cases are all seen by the sister. The sister is sent down to see them.

9260. The sister sees the case first and she would explain to her: "This is a very peculiar hospital for peculiar diseases and you must go away"?—Yes. (Miss Garrett.) We do that. We had some four years ago the words "Lock Hospital" in big iron letters, and they sometimes come thinking they are going to Paddington Infirmary. We are next door to the Paddington Infirmary.

9261. (Dr. Scharlieb) Do you think a great many of those girls who acquire syphilis acquire it through ignorance?—I think they are cases of assault in every instance.

9262. There would be a certain number of instances that are not cases of assault, but cases of consent?—Afterwards, I think.

9263. You think it is nearly always assault at first?—Yes.

9264. And then afterwards it is consent?—Yes.

9265. So that teaching them beforehand about the dangers would not save them, you think?—I think it would save them.

9266. That even after a girl had once been assaulted, if she knew the possible consequences she would try to keep clear?—I think so.

9267. Therefore would you think it well to have a certain number of women, perhaps women doctors and women nurses, and so on, to instruct ignorant girls?—I have thought about that very much. I have brought it before my committee, or, at least Miss Kinnaird, to have younger girls in the hospital taught, and keep the younger girls who are in the Kinnaird Ward in the outer ward. I did think it would be desirable to have the lady doctor teach those girls. I have felt that most strongly.

9268. Do you think the overcrowding and promiscuous sleeping of the poor leads to this trouble?—I think so in some instances, but I cannot say. My experience is confined to the hospital.

9269. (Dr. Mott.) You mentioned the fact that the rescue homes do not continue the treatment except in one instance?—Yes.

9270. Do you think anything could be done so that they should continue the treatment? I mean, are the matrons of the rescue homes informed of the desirability of continuing the treatment?—I do not see the matrons of the homes. I see the rescue workers who come for the girls. We always impress it upon the workers; but they do not seem to realise the absolute necessity of continual treatment. They see no active symptoms.

9271. I suppose there is a matron or somebody in responsible charge of the rescue homes?—Yes, there is always.

9272. Are they impressed in any way by the desirability and the necessity of continuing treatment in order to lead to a cure?—No, they are not. (Miss Kinnaird.) Some years ago Mrs. Wethered summoned a meeting of them in order to tell them. There was a very full meeting in the hospital committee room and they were told; but you know how people change and how things go on.

9273. Do not you think that would be very desirable?—I think it would be to have it again.

9274. Because it seems to me there is means of treatment in all these places. I mean they come up from various towns like Brighton, Eastbourne, and other places that I know of, and there are doctors there who are capable of continuing the treatment, and there are hospitals there?—Exactly.

9275. There is no reason why these girls should not continue the treatment at these hospitals. I think really that is a very necessary thing?—(Miss Garrett.) They said it would require a great outlay of money and they could not afford it. (Miss Kinnaird.) That is it.

9276. But I think if the State is going to do anything in support of this movement, it should be capable of dealing with that?—Exactly.

9277. You mentioned the fact that the parents are informed when their babies are admitted for syphilis. Are these parents also told, especially the mother, that probably she may be suffering from the disease?—(Miss Garrett.) The house surgeon and the sister tell her that. I think, in every instance.

9278. Then is her blood tested, and if necessary is she treated?—We do not always have the mother come with the child. The foster mother very often brings her or someone else. We admitted a child two days ago which was just two weeks old, and it was a mass of disease. The foster mother brought the child.

9279. But would it not be very desirable to insist on the mother coming to be treated or else she will continue to produce diseased children?—They said the mother was free of disease.

9280. She could not be free of disease if she has brought forth this diseased child?—I do not suppose the mother will be treated. The baby is only two weeks old and there is no means of getting to the mother. Who would do that?

9281. There are no means of getting to the mother, do you say?—No.

9282. But that is not always the case. You mentioned the fact that the parents came and were informed?—Yes, they come every Saturday to see their children.

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[Continued.]

9283. I dare say it is carried out. I have cases of this sort in the hospital, and I always point out to them the desirability of having their blood tested in order to see whether it is necessary they should have treatment?—I believe that is done by the house surgeon and the sister.

9284. I believe it is a very important matter; and if it is not inquired into by the authorities in charge of the hospital it should be?—I believe it is done.

9285. It is not only that child; but they may have other children, and if those children give the blood test, they should be treated in order to prevent the disease appearing at a later age?—(Miss Kinnird.) I think you have touched a most important point. The only thing is we have not a large out-patient department. As you have heard, we have no private rooms for it. We can treat just a few in a make-shift room. We know it is not enough.

9286. I have patients who have come voluntarily. I have mothers who bring all the family in order to have their blood tested and treated, and they have been very grateful for having been told that the child was suffering from this disease, and they have desired that they should be free from it, and that in future children that are born should also be free, so that I think you might bear that in mind?—Yes, we ought to bear that in mind.

9287. (Rev. J. Scott Lidgett.) I am sorry I did not quite catch one or two of your answers to Mr. Lane, and therefore, I am afraid I may be covering ground that he covered. Do I understand that at present there is some training given to rescue workers in your hospital?—(Miss Garrett.) Not now. Some years ago we did give some training for only a few weeks.

9288. Why was it abandoned?—It was not abandoned. The offer is still open. The hospital still offers to give training to rescue workers for three months.

9289. Would you define the object with which the training is to be given? What is the object?—In order that they can take positions in rescue homes and have an idea when a patient has got disease.

9290. Do they come into residence for this training?—They come and live in the hospital.

9291. Is it intended not merely to enable them to detect the disease, but to assist you in following up treatment after the patient is discharged to the rescue homes?—That is the idea. About three years ago the secretary of the church army asked if they could have their workers trained in the hospital, and the medical man said it must be three months. The church army thought that it was a long time, and they also objected to the one guinea per week. That merely covered board, lodging and laundry.

9292. But in your judgment, the permanent effect of your work might be greatly increased if rescue workers were thus trained?—Yes, I think so. I think it would be a great boon.

9293. So that there would be complete co-operation between those who sent the girls in and received them out again and your hospital?—Yes, I feel so.

9294. (Sir John Collie.) Have you any record of the histories of any of these married women with regard to the number of children they have and the amount of disease that is found in them?—We do ask the question, but I cannot remember just now. (Miss Kinnird.) You do not keep a book for that. (Miss Garrett.) No, we only take the child.

9295. You have no record?—No.

9296. You said that you thought a special hospital was more useful than a general hospital for this particular class of case, and you gave us the reason, that the after care was more likely to be carried out at a special lock hospital; but I presume, if arrangements could be made whereby these women had after-care treatment by philanthropic bodies, and so forth, the opportunities to cure these cases at general hospitals would be at least equal to that at the lock hospitals?—These girls have no permanent addresses, and I do not think they will give their proper address.

9297. So that really you then would not be in any better position as regards the after care than the

general hospital is?—We keep in touch with the girls. We always have their address and they know a nurse may call to see them any day.

9298. I do not think you quite follow me. Suppose these girls went to a general hospital, they would give their addresses, and suppose they had after-care treatment and were followed up, then I take it your objection to the general hospitals would disappear?—(Miss Kinnird.) They are such a very difficult class to deal with, and it is so absolutely different to the general hospital cases. I think what is in Miss Garrett's mind is that unless they had trained workers for that special kind of case at a general hospital not much would be done. They would go in and out, and they are very troublesome and very difficult. Ours is not only pure nursing like accident cases; it is that so much control is wanted and patience and watching.

9299. Perhaps you did not notice that I assumed the same after care might follow in general hospitals?—Yes; I feel, and I think Miss Garrett does—we were talking the other day—that it needs to be tested. We cannot say it would or it would not. My impression, and also her impression is, that the doctors get more support in a special hospital. Is not that so? (Miss Garrett.) Yes.

9300. That is another point I will not go into?—(Miss Kinnird.) That is what we have had testified to in innumerable cases by workers throughout many years.

9301. Do you think, Miss Garrett, with regard to attendance on these women, if they had opportunities of having out-door treatment in the evening, they would be more likely to attend regularly?—(Miss Garrett.) I think they would come to Harrow Road for that if we had the facilities.

9302. But taking the question generally, do you think if there were facilities for evening treatment of these diseases, women in the district would be more likely to attend than if they have only a forenoon and afternoon attendance?—I do think so.

9303. Do you instruct your nurses on the danger of this disease?—Yes.

9304. Have you any experience of any of your nurses being infected through contact with a patient?—One nurse, and I think one doctor.

9305. So that you really do see a good deal of innocent infection one way or another there?—We are more careful now since these accidents happened, and the nurses wear gloves.

9306. As you told us, you see a large number of cases of innocent infection and a large number of inherited cases?—Yes, a large number of inherited cases, and some acquired.

9307. Do you believe that publicity given to these diseases, such as is now occurring, partly in connection with this Commission, and so forth, will be the means of bringing a larger number of these people for earlier treatment?—I believe so.

9308. Then would you mind telling us quite frankly your views with regard to lady doctors, because some of us quite agree with you. I would like to know exactly what you think. It is a very important point. Do you think lady doctors and house surgeons would be more acceptable to these women? Do you think they would be more likely to come in larger numbers if they knew they would be treated by a woman?—That is not, I think, what I mean. If I may just say what my feeling is, we have now a younger type of girl. They are more attractive and more fascinating, and therein lies my difficulty in the hospital. I had not that difficulty until the type of girl changed; but now I have that difficulty. Therefore I thought if we had lady doctors it would be better for the hospital, better for the girls, and better for everybody.

9309. (Mrs. Burguin.) Do you in any way select your patients? Have you any types that you specially admit to the hospital?—I do not quite understand.

9310. This is what I mean. Does every patient coming infected gain admission?—She gains admission.

9311. So that you have the shop girl and the street walker all in the same wards?—No, we classify.

9312. You admit all classes, but you classify?—Yes; but there has been a difficulty in our classification,

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[Continued.]

because the medical men wanted to put all our syphilis cases in a ward by themselves. There is that difficulty with classification now.

9313. I quite see that. You remember I visited it?—Yes.

9314. It struck me whether you had full facilities for classification, not only on the ground of disease, but on the ground of the course, as it were, of the life of the girl. Do you think you have full facilities for classification?—Not full nowadays.

9315. I think you have an excellent committee of management for your hospital. Does this committee take any after-care work? I mean by after-care work an interest and watchfulness over the girls after they have left your hospital?—Yes; all the girls that pass into our home are directly under the care of a ladies' committee.

9316. Only those who pass through your home. That is a small proportion?—A great number go back to other homes. They go back to the homes that sent them. They are removed by the rescue workers.

9317. You call that after-care?—Yes.

9318. Do they get monetary assistance to help them until such time as they can get their living?—They are helped. We work very closely with the Marlborough Ladies' Association for the Care of Friendless Girls.

9319. But these would not come under the head of friendless girls, would they?—Some of them are friendless when they leave the hospital. (*Miss Kinnaird.*) You mean the Paddington Diocesan Association. Miss Garrett does not understand the difference between all these other girls.

9320. There is a distinction?—Yes, a great distinction.

9321. What I wanted to gather was as to what happened when a girl leaves the hospital. I thought you believed a great deal in moral teaching during the time they are in the hospital. I think I saw that?—Yes.

9322. Then your hope is that having been cured they will not return to evil living?—Yes, that is our hope.

9323. What help do you give them to attain that object?—Those that come into our home get it, and those that go into other homes get it. There is always a difficulty in following them up. We do it from our home in one year. They nearly all leave within the year and drop all trace, and after one year they do not like to be visited by the visitor, because they get their own character and go back again. The old taint does not go on any longer. They will come up and see us or write to the matrons. We follow them always if they go to another mistress, because they object, and it means telling the tale to the mistress. It cannot be done. Miss Garrett's point is that the difficulty now is they take their own discharge, thinking "606" has cured them, and they do not want to be followed by the hospital workers. They will not come to us, but they find a place for themselves, and they do not want to be followed. It is positively impossible to follow them.

9324. But have you had girls returned reinfected to the hospital?—(*Miss Garrett.*) We do, but rarely. (*Miss Kinnaird.*) They have come through the workhouse. (*Miss Garrett.*) Yes, they only come through the workhouse. That has been in the past.

9325. (*Rev. J. Scott Lidgett.*) But rarely, I understand?—Rarely nowadays.

9326. (*Mrs. Burgwin.*) Do you have any difficulty with regard to girls discharged from your hospital in getting them situations as domestic servants?—They find situations for themselves. I would not do so.

9327. I was wondering what you did for the character. You do not find it?—No. They find situations for themselves, and then they come for treatment. (*Miss Kinnaird.*) You see their character is nil. We get most excellent places for them, and they may leave the next week or within the next month, or they may stop there a year. Nobody knows. There is not the slightest guarantee. They all take them knowing that we give them no character. We cannot give them a character. We tell them they have done their best. We tell them what we have found. We tell them the truth, and they take them out of kindness, and also lack of servants. We cannot do more than that. We cannot give a character.

4328. Have you found in the case of the young people coming in, it is through incest that they have been infected?—(*Miss Garrett.*) I do not know that.

4329. You have not come across it in those younger cases?—No.

9330. (*Dr. Mott.*) May I ask one more question? What proportion of these girls belongs to the feeble-minded class?—(*Miss Kinnaird.*) A good many are rather. (*Miss Garrett.*) We have not so many now, but we did have.

(*Dr. Mott.*) It used to be about 20 per cent.

9331. (*Mrs. Burgwin.*) That is what made me ask you whether you in any way selected. I was coming to the feeble-minded class. There is no selection made by the surgeon in any way. It is only the disease?—It is only the disease. (*Miss Kinnaird.*) It is the disease entirely.

9332. Are the cases coming to your hospital younger than they were?—Very much younger. There are only very few that are old. Very few of them are over 30.

9333. Can you account for that at all?—I cannot account for it.

9334. I was struck with the young girls I saw there?—Yes.

9335. (*Mr. Lane.*) I should like to make one point clear. Is a girl readmitted if she has been in the hospital and treated for gonorrhœa and gone out cured if she contracts syphilis?—She is admitted now.

9336. Formerly it was not the case?—Formerly it was against the laws of the hospital to do so.

9337. Nowadays there is no obstacle put in the way of a girl being readmitted into the hospital, though it is obvious she has been continuing her life of immorality?—There is not the same; but we have made one or two exceptions where it would have been disastrous to have the patient in, and I have advised her to go to Dean Street; but that is only in one instance. I sent her back to Dean Street.

9338. But formerly it was impossible for a girl to get in a second time if she was suffering from a fresh disease?—A second time, but not a third time. She is sent to the workhouse.

9339. Then they come in from the workhouse?—Yes.

(*Chairman.*) Thank you.

The witness withdrew.

TWENTY-FOURTH DAY.

Monday, 9th March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLEIB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. AMAND ROUTH called and examined.

9340. (*Chairman*.) You are Consulting Obstetric Physician to the Charing Cross Hospital and to the Samaritan Free Hospital for Women and Children?—Yes.

9341. How long have you held that post?—I have been Consulting Obstetric Physician to the Charing Cross Hospital about a year, after being nearly 30 years on the active staff. I have been Consulting Physician to the Samaritan for, I suppose, about 10 years, when I retired from the active work.

9342. I understand you have made a special study of the effect of syphilis upon pregnant women and the child during its ante-natal and early post-natal life?—Yes.

9343. In a recent lecture you have shown that there are about as many foetal deaths in the nine months of intra-uterine life as there are deaths among the survivors during their first year of life. That is a very important statement, is it not?—Yes. I have not seen it mentioned before; but I think the statistics I gave in the lecture pretty well prove it.

You base those figures upon statistics given by Dr. Newsholme? As it is a point which is very important, I should like to ask Dr. Newsholme if he thinks he can rely entirely upon those statistics?

(*Dr. Newsholme*.) I do not think one ought to say quite that the results obtained by Dr. Routh are based entirely on the statistics given by me. My statistics were to the effect that the proportion of still-births to total births was about 3 per cent. Those are not very trustworthy figures. I think they err on the side of incompleteness.

(*Chairman*.) They are below rather than above?

(*Dr. Newsholme*.) I think they are probably below the facts; but even supposing they were correct, the more debatable point is as to the abortions being at least four times the still-births.

(*Chairman*.) That is what I am coming to. You are not responsible for that?

9344. (*Dr. Newsholme*.) I am not in any way responsible for that statement.

(*Chairman*.) (*To the witness*.) Assuming the 3 per cent. Dr. Newsholme gave is accurate, then upon what does the statement stand that abortions are at least four times as frequent?—If you look at page 4 of my pamphlet, there are statistics there in Table 1, as far as I could get them, giving the ideas of different people as to the number of abortions that take place. A large number of those are in the statistics of doctors, and necessarily the statistics of doctors who deal with gynaecological matters would have a larger percentage of abortions in the women coming to them than ordinary patients. It is apparently quite impossible to get statistics from a series of women or a series of hospital patients who are not gynaecological. As regards my own statistics, it comes out that the women who attended me had still-births (as far as I could get them to understand what still-births meant) in the proportion of 2·8 per cent. That is somewhere

about the average; but the miscarriages amounted to 27·4 per cent., a much larger proportion than is probable amongst the ordinary population.

9345. Taking all the figures you have given in this table, they show a certain amount of agreement, do they not?—Yes.

9346. There is a fair general agreement?—They are all considerably above what I have assumed. I have only assumed in Table 3, on page 5, that the still-birth rate is 2·2; but it is pretty clear that the general still-birth rate in England and Wales is higher than that. It is higher probably than 3 per cent.

9347. Accepting the 3 per cent., and accepting the four times as frequent abortions, you arrive at the conclusion that the deaths in utero and during the first year of life are about 100,000 each, making 200,000 in all?—Yes.

9348. Then you go on to say: "When it is considered that the number of infants who survived this "double loss in England and Wales in 1911 was only "782,362, it will be seen that the loss to the nation is "relatively enormous." That must be. It is a very high proportion of loss during these two periods to the total number of births. It is higher than one would expect. Then you say of the children who are born alive many may die within a few hours, and a large number of these are due to ante-natal disease, that is, disease contracted from the mother?—Not necessarily, because it might be from the father.

9349. I mean the father or mother?—Yes. The children who arrive at their birth in a weak and diseased state very easily die either at the birth or very soon afterwards.

9350. Then this is rather a startling figure also. You say that one-fourth of the children who die in their first year of life die in the first week of life. That, I suppose, is a trustworthy statement from the registrar's figures?—Yes.

9351. You go on to say: "All authorities believe "that syphilis is the main cause both of early "intra-uterine death and of still-birth." Are you of that opinion yourself?—I was until comparatively recently, when I began to inquire very definitely into the causes of abortion, but there seems to be some doubt as to whether our idea that early abortions are due to syphilis in the main is a true one. May I read a little statement? A review of a work of Franz Weber, of Berlin, is given in the "Journal of Obstetrics" for January 1913, which was translated by Dr. Eardley Holland. Weber had investigated a series of 300 abortions in women where there was no clinical evidence of syphilis.

9352. That does not bar other evidence?—It means, apart from the Wassermann test, for instance, one cannot say whether the women were syphilitic or not; but these women had no evidence of it. He examined 67 of these cases with the Wassermann reaction, and in 35 of these, where abortion had taken place before the 16th week of pregnancy, the reaction was uniformly

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[Continued.]

negative, and no spirochætæ were found in the embryo. In 32 cases between the 16th and 28th week, 12 gave a positive reaction and in 9 of these spirochætæ were found in the embryo.

9353. What proportion of positive reactions to the number of women does that give?—12 out of the last 32, and in the former 35 there were none, showing that the more advanced the pregnancy the more positive is the reaction, and the spirochætæ were found in 9 of those 12. That is between the 16th and the 28th week. On the other hand, when he came to examine the macerated fœtuses born in the later months of pregnancy he found that 84 per cent. of them showed signs of syphilis.

9354. 84 per cent?—Yes, 84 per cent. of the macerated still-born fœtuses.

9355. That is very strong evidence of syphilis playing a very large part in still-births?—Very large indeed. The only question is about the abortions, and the fact that one does not find evidence of spirochætæ in the abortions does not necessarily prove they are not syphilitic, but it may prove they are difficult to find.

9356. Then in cases of abortion there has been not much examination, has there?—No, that is where we are entirely at fault, because there has been no systematic examinations of abortions.

9357. That is what I thought. Can you say what was the total of those that were macerated?—No, the numbers are not stated.

9358. The figures would depend upon that?—May I refer to some work Dr. Eardley Holland has recently done. I have made a statement here in my notes: "Probably the first published approach to a routine examination of still-births in this country after the discovery of the spirochæta pallida was made by Dr. Herbert Williamson and Dr. Eardley Holland, who read a valuable paper in 1908 at the obstetric section of the Royal Society of Medicine, on a case of intra-uterine death of the fœtus occurring in six consecutive pregnancies. Neither husband nor wife afforded any history or clinical evidence of syphilitic infection, and in their absence specific treatment was not adopted till her sixth confinement, in September 1906." The Wassermann reaction was not then available.

9359. Therefore, the parents were not tested by the Wassermann?—No, that was only discovered in May 1905.

9360. And the disease might have been in either or both of them?—Yes. I will go on. "In 1906, when search was made for the spirochæta pallida in the macerated fœtus by Dr. Eardley Holland at the Queen Charlotte's Hospital, he found the spirochæte freely distributed in the connective tissue of the liver and spleen, but not in the umbilical cord. The placenta had been destroyed. In May 1907 the woman was again pregnant, and owing to the fact that the spirochæte had been found in the previous child, she was put under treatment by mercury and iodine of potassium. She was delivered of living twins on 1st November, but unfortunately premature labour was induced." I do not quite see why. I suppose the twins could not be diagnosed, and it was a very large abdomen. The woman was thought to be near full time, and they did not want to run any risk. "Induction of labour was produced. Unfortunately they were born too prematurely, and though the children were born alive, both died in a few days; but their bodies were carefully examined, and there were no signs of syphilis at all."

9361. Do you attribute that to the treatment of the mother?—Yes.

9362. The probability is that those children might have been born and grown up healthy?—Yes.

9363. Then you tell us of this outbreak in Uganda. You say out of 40,000 consecutive dispensary patients that were examined, 22 per cent. suffered from venereal disease, and 70 per cent. of the children born in that country either died from premature birth or were still-born, or died in the first week after birth from the effect of syphilis. I suppose these premature births and deaths in the first week might also have been due to the shockingly bad treatment of the kind the

natives practice in those countries?—Yes. Dr. Cook says definitely in the report, which I did not quote in full, that this mortality is partly due to the fact that they have been to their medicine men and have been treated by them, and come under treatment rather late.

9364. So that probably it is a larger number than would otherwise have died?—If they had been treated properly, yes.

9365. Then when he speaks of the 70 per cent. who died in the first week after birth from the effects of syphilis, were the effects of syphilis actually observed by him in those children who died the first week after birth?—That I could not say. This is in the Report of the Uganda Mission. He is one of the two doctors. Most of the 70 per cent. were ante-natal deaths.

9366. That would be rather an important point, would it not; that syphilis was actually recognised in those children who died the first week?—I think he would not say that unless he was sure of it, and there was some evidence.

9367. Then you say you wish to see compulsory registration of still-births within 36 hours of birth, and the certificate to give the probable cause of death. You want that done?—Yes. In my précis I mention three objects which would result from this registration and notification: one, the diagnosis of the syphilis, another the supplying of the required treatment, and I would like to add also the getting of the material for research. At present it is extremely difficult to get material. A prematurely born fœtus may be destroyed at once.

9368. You know, as matters now stand, that about 60 per cent. of the population is supposed to be under compulsory notification of still-births. Do you think that the compulsory notification of still-births should be legally enforced over the whole of the population?—Yes. I should like compulsory registration, and notification, if it is possible. That is, registration to get to know the facts from the point of view of statistics, and also the notification to the medical officer of health, so that that particular woman might be under observation for subsequent pregnancies, and that we might be able to get the material for research.

9369. When you say the certificate is to give the probable cause of death, that would mean in most cases, or in some of the cases, a complete examination of the body of the infant, would it not?—Yes. In the ordinary way, unless a doctor knew that the woman was suffering from some specific disease, he would not be able to give the cause of death.

9370. And therefore this registration of infants would fail to a great extent?—Yes, as far as the cause is concerned; but I think one of the great advantages would be that the doctors would then realise how extremely little they know. I mean, we can certify almost with certainty to the cause of death in an adult; but our knowledge does not extend sufficiently to the conditions in the fœtus to enable us to certify with any assurance.

9371. As matters stand, with our present great deficiency of testing facilities, the probability is that very few of these still-births would be returned as being due to their true cause, syphilis?—Yes, I think, even if a doctor were morally certain it was syphilis, he would very reluctantly give a certificate to that effect if it were going through the hands of the parents.

9372. Then you say the medical certificate must be secret. If it is kept secret, of course it would be valuable for no other purposes than statistics; that is, if nothing more were done?—If it is registration that is so; but if it were notification, supposing the medical officer of health realised it was a syphilitic case, the woman would be put under some sort of supervision, especially if she was on the Insurance Act.

9373. We are coming to the notification of the disease, and I am going to question you about that later. You mean it would be necessary, if it is to be of any use, that the medical certificate should not be secret in the sense that the medical officer of health could make no use of it?—No, I think the doctor would not be able as a rule to give the cause; but if the specimen were referred to the laboratory

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under his control, or to a laboratory of some hospital near, and the cause of death was then certified, that would come in extremely useful, not only from the point of view of statistics, but from the point of view of the woman herself subsequently.

9374. That is the effect of the general notification of diseases to the health officer?—Yes.

9375. Which I thought you were opposed to. Then you pass to compulsory notification to the medical officer of health of every abortion of a formed fœtus, and of every still-birth within 36 hours of birth, or within 12 hours if the woman is not attended by a qualified medical practitioner. That is merely notification of the fact, not accompanied by any statements of the cause, or any attempt to arrive at the cause?—I have not meant to exclude the cause if it is known; but my object rather was to get this formed fœtus and the placenta sent to the medical officer of health's laboratory to have it investigated.

9376. You think that is the only way to deal with it from a practical point of view?—It would get us material for research, for obviously if they were all thrown away no examination of them could be made.

9377. In No. 3 of your proposals you want to ensure the care of a woman throughout her pregnancy, I gather?—Yes. I do not think we shall get any real relief, or any increase of the birth-rate, unless we get the woman under proper medical supervision.

9378. Would you like to see every woman under proper supervision prior to the birth of the child?—Yes. In well-to-do practice of course that is easy to arrange, at least, comparatively easy; but amongst the poorer classes it is very difficult, and I have been thinking what could be the best way. For instance, if a woman had to notify her pregnancy to her panel doctor, that would be one way of getting her put under supervision; or, supposing she notified to the midwife who was going to attend her, the midwife would notify that pregnancy to the medical officer of health, and in that case a district visitor or doctor would see her, and see if she was all right. Then if she was known to have had miscarriages or still-births, a Wassermann test could be made, and she might be found to be infected. Then she would have healthy children, because she could be treated.

9379. She could undergo treatment, and probably produce healthy children; so that you are relying not only on the mere notification by the medical officer or the midwife, but upon such inquiry into the antecedents of the woman as to lead to her being tested, in order that it might be ascertained without any doubt if she had any taint of syphilis?—Yes, that is so. My idea is that all these things would hang together much better if we had these different means of getting at the woman herself instead of getting merely at statistics.

9380. You say that would be particularly useful for the diagnosis and the salvarsan treatment of syphilis; so that you would have to provide for those women a sufficient number of clinics of some sort where, if they were found to be infected, they could go and have a full treatment for syphilis before they were confined?—Yes.

9381. Are you in favour of a form of research laboratories in all general and lying-in hospitals?—They ought to be created certainly in all areas; I think you are much more likely to get experts if they are in the large centres of population where there are no hospitals as well as in lying-in hospitals and general hospitals in large cities.

9382. Would you have both? Would you have experts working in laboratories in the centres of population, or smaller laboratories attached to part of the hospital? Which would you prefer?—I think if there is a large town anywhere near, these specimens ought to be sent there. They could be sent through the medical officer of health either to those towns or to the nearest laboratory centre if a long way from the towns.

9383. In any case, you think there ought to be a very large increase of research work?—Yes.

9384. And if it were made available, then you would have every abortion and still-birth, and every

placenta and other product of conception examined pathologically, bacteriologically, and chemically?—Yes.

9385. So as to ascertain the true cause of death?—Yes; that is the main object as regards the cause of death. Compulsory notification would help us to get the material, especially from the large infirmaries in London, for instance, where there are more still-births of this nature than anywhere else, because there are a larger number of illegitimate cases who are more likely to be diseased. In such infirmaries there is no laboratory that could carry out such expert-research, and my idea rather was that it might be possible for each general hospital to have the nearest infirmaries associated with them, so that the material could be sent on in sealed bottles and labelled with the history of the case. Then they could be tested at the laboratory at the general hospital. Otherwise the general hospitals would not get enough material.

9386. I do not know whether the Commission is really concerned with giving more financial assistance towards inspecting mothers. I suppose you mean by that, if there were a special extension of maternity benefit, it would be made conditional on these women presenting themselves for supervision during pregnancy?—Yes; it would be a way by which they would be more likely to voluntarily notify their pregnancy, because they would get something by it, and once notified they would be attended to.

9387. You have come to the conclusion now, in spite of recent doubts, that the mothers can be simultaneously fertilised and infected?—Yes. I do not think we can put aside the clinical evidence that we have.

9388. Do you think that is conclusive?—Of course, when the spirochæte was found, it was found to be larger than the spermatozoa, and it was found difficult to explain that infection of the ovum could occur at conception. But whether it is possible that the spirochæte could be carried up in the seminal fluid, or whether it could be merely attached to the spermatozoa, or whether the spores that McDonagh has discovered would explain the difficulty—whatever the explanation is, I think there is no doubt that the ovum can be infected direct from the father, and that the mother may not show any evidence of syphilis unless the father had at the same time infecting sores.

9389. Do you regard this discovery of the spore as practically established? It opens up rather a new field?—I do not know that I am competent to express such an opinion, because I do not understand the evidence upon which it is got. The evidence, to a large extent, is chemical. Dr. McDonagh makes out that the spores are chemically of tougher material, as it were, than the spirochætes; and they cannot be destroyed, for instance, by salvarsan, whereas the spirochæte can.

9390. But if the spore theory is correct, I understand it would explain some of the apparent aberrations in Colles's Law?—Yes. Would your Lordship allow me to read a few remarks I have made here about the explanation of Colles's Law? There are at least three explanations, one of which is Mr. McDonagh's theory. These are from notes I have made from a pamphlet he has written this year on the biology of the spirochæte. I think these are practically what his views are: "The spirochæta pallida is a male. The spores are the result of the multiple sub-division of the fertilised female cells. These spores are very minute, and to a great extent indestructible both by salvarsan and by the placental toxins which are formed as a result of the action of the syncytial or more external cells of the chorionic villi."

9391. Would that explain latency of the disease over a long period?—I think to a certain extent latency during the pregnant period, yes.

9392. It would?—But not the latency of infection of syphilis in the ordinary way. I might go on: "The spores pass up with the semen along the Fallopian tubes, and find themselves in both the maternal and fetal portions of the early embryo, that is, in the villi and the inter-villous spaces. The spores in the fetus, in the villi of the chorion, or among the

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"embryonic cells, develop into the spirochæte, and may or may not destroy the embryo. If it survives, it becomes a congenital syphilitic with a positive reaction. The spores in the decidua and the maternal portion of the early placenta do not develop into the spirochæte during the pregnancy owing to the presence of syncytial ferments and their resulting toxins; but the spores are not destroyed, because their chemical structure is different to these toxins, which circulate in the maternal blood but not in the foetal. This delay in the development in the maternal tissues during pregnancy explains the negative maternal Wassermann reaction during that period. The development of the spirochæta pallida goes on shortly after labour in the mother, and the mother then presents a positive reaction." That is the so-called conceptional syphilis from McDonagh's point of view. The second theory is that the mother is rendered immune: "The ovum is fertilised and infected at the same moment, and the mother is rendered immune by anti-bodies formed in the foetus, and by cells of the foetal syncytium thrown off into the maternal circulation during pregnancy. It is assumed in this theory, either that no spores or spirochæta pallida are able to pass through the syncytial epithelium, or if they do penetrate they are destroyed by the toxins thrown out by the action of the syncytial ferments." Then a third theory is the one that is referred to, of latent syphilis; where the mother has been previously infected, but the disease is latent or perhaps asymptomatic.

9393. I suppose all these theories still await complete confirmation?—Yes.

9394. More investigation is required before we can pronounce any opinion upon them?—Yes; and I think they are extremely important from the point of view of treatment. For instance, if you have reason to think a woman has had a syphilitic child, yet you are not sure, and you examine her by the Wassermann reaction and find she is negative, which many of these women are, one would hesitate to use salvarsan unless one was quite sure from other evidence.

9395. But still, it might be the right thing to do?—Yes. In the old days we used to give mercury, and we used to get healthy children as a result of that. But I doubt if one would give mercury now if the Wassermann reaction was negative, until we understand why it is negative in these cases.

9396. Is it an established fact, do you think, that if the mother is infected before conception, early abortion follows? Is that the result?—As I said before, we are a little in doubt about the abortions. We want more exact methods of finding out. As I say, we have had no routine examination of abortions in this country at all. They have been, as a rule, only anatomically examined, and have not been sent to the laboratories to be examined because the laboratory staffs are over-worked as it is.

9397. Then you lay down as a general rule that if syphilis is suspected, the mother must be tested?—Yes.

9398. You think that should be invariably observed, if there is any reason for suspecting the existence of syphilis?—Yes. If she has definite syphilitic symptoms it would not be necessary; for it is an expensive way of finding out. But if it is one of those doubtful cases of syphilitic children, with no clinical evidence in the mother, that is the only way to find out, and even then, as I say, the reaction may be negative.

9399. Then you lay down an arrangement that free treatment of salvarsan must be provided throughout the country for all such cases. Therefore that means that it must be supplied free to the hospitals which are prepared to administer it?—Yes; that is another expensive thing. I think it is 6s. a dose.

9400. You say: "McDonagh says that if salvarsan is given before secondaries appear in a woman infected during pregnancy, the child will escape infection." That is in accordance with one of the three theories you have given us?—Yes.

9401. But it is a fact, I suppose, whatever the cause may be, that a large number of syphilitic infants under

treatment may become healthy?—Yes, may be born healthy.

9402. And therefore saved to society?—Yes.

9403. And there is unanimity on the point that the intravenous injection of salvarsan does not cause abortion or injure the foetus in utero?—Yes.

9404. Does it also prevent still-births?—Yes, if it were given early enough.

9405. Given early enough, it would prevent still-births or abortions?—Yes.

9406. Now, coming to what you say about gonorrhœa do you regard gonorrhœa as having a very great effect upon the birth-rate?—Yes, by producing sterility.

9407. You think it is a very considerable factor in reducing the birth-rate?—Yes. Of course we have no statistics that point to that. I looked up Howard Kelly's views of the Johns Hopkins University, Baltimore. He quotes Noeggerath as saying that 90 per cent. of sterile women are married to husbands who have had gonorrhœa. Of course, that does not necessarily mean that the sterility is due to gonorrhœa; but that is the statistical fact.

9408. Then you point out that the effect of gonorrhœa, or the infection of women by gonorrhœa, may make conception unlikely, or it may produce prolonged sterility, or in certain cases it may produce permanent sterility?—Yes. She cannot conceive during an acute or sub-acute attack, and becomes temporarily or permanently sterile if the fallopian tubes are involved.

9409. But all this may happen apparently by infection by a husband who had no signs, and believed himself to be cured?—Yes; just a little gleet discharge and the sticking together of the lips of the urethral orifice may be all the evidence he has. He may not notice that, and yet gonococcus may be found in the remote parts of the urethra. That, of course, I only know from the experience of others.

9410. Then it cannot be said that you know for certain that gonorrhœa has ever been cured?—I cannot say that. I suppose it would be possible to be quite sure if you examined a sufficient number of times; but sometimes alcohol will light up a gonorrhœa that is supposed to have been cured for years and years.

9411. You regard that as an important effect of alcohol in awakening latent gonorrhœa?—It is one of the tests, I believe, to see whether a man is gonorrhœal, to give him a strong dose of alcohol. That, and getting married, for instance, will light up an old and apparently completely cured attack.

9412. That means, does it not, that any man who has had gonorrhœa at any time of his life ought to be examined and watched for some time before he is really fit to be married?—I think that does follow.

9413. Then you say if a woman is infected with gonorrhœa in the early weeks of pregnancy abortion may follow, and in the last few weeks the child runs a great risk of being infected at birth?—Yes; the first few weeks or months of pregnancy the ovum is in the upper part of the uterus, as a rule, and the lower part is unoccupied; so if the woman gets inflammation in the vagina, it would creep up the uterus and cause inflammation of the lower zone, which would bring on miscarriage. It does not often happen. In the later months of pregnancy it is still less likely to happen; but I have seen cases within a fortnight of pregnancy, and this is what happens. The child is the chief sufferer, unless the woman has also some other germs present such as streptococci, a mixed infection, in which case she may get blood-poisoning and die of septicæmia, or if only gonococci are present, she may get acute inflammation of the womb and the tubes, and not really suffer from septicæmia.

9414. Do you think there are many cases of deaths of women which are not attributed to gonorrhœa when they ought to be?—Apart from pregnancy?

9415. Yes?—No. The ordinary effect of gonorrhœa does not cause death. I have seen very few cases of death directly due to gonorrhœa. But what it does is to make them permanent invalids later on. I have brought some specimens here which might be interesting to look at; first of all of a normal uterus, ovaries and tubes, and then there are three or four specimens of

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inflammation of the appendages of the womb with resulting sterility. Of course the primary infection in a woman is in the lower areas of the genito-urinary track, the urethra, and the glands of the Bartholini at the orifice of the vagina. Then it spreads up, and it may be months or years, if it is not an acute attack, before it reaches the higher structures. Then it produces disease of the lining membrane of the womb, which would of itself prevent the ovum becoming implanted there, or it may produce inflammation of the tubes, and lead to permanent occlusion of them.

9416. Now we come back to your view as regards compulsory notification. You do not favour compulsory notification, I understand, unless anonymity could be assured. You say many men and most women will not consult a doctor, but will consult venereal quacks, who multiply. You are thinking, I suppose, of the upper classes who do now consult doctors, not of poor women who would be under the panel system, and whom you think should be notified that they have syphilis?—Yes; I was speaking here more of the acute cases that come under notice when first infected, as well as others. With regard to women, it is really to protect them, and it would still be anonymous from their point of view. It would be known to the medical officer of health, and he would send trusted representatives, practitioners, to deal with them, but they would be quite unaware that they would be notified. I imagine it would be the doctor who would notify in any case, not the individual.

9417. It would be the doctor who discovers it who makes the personal notification?—Yes; but what I mean is that if the man or woman knew they were going to be notified by name—especially in their own district—they would not go and consult a doctor. That is what my feeling is.

9418. And if they were notified secretly without a name, that would not be of any value, because the health officer would not be able to do anything?—The health officer would know.

9419. By name?—By name. I mean, it would not be known in the district. Nobody minds being notified for scarlatina now. Perhaps they are rather proud of it; but they would certainly object to being notified for this.

9420. You mean the notification by name to the health officer should be done confidentially?—Yes.

9421. But I understand you to say you do not think that that would be believed in—the confidential part of it?—That is just the difficulty, whether the people would be afraid; but still, if they notified their pregnancy to the panel doctor, and he discovered it, nothing need be said about notification at all. It would be the doctor who would notify. The patient would not know anything about it then.

9422. I thought you laid down, in the case of these women who received special help from the Government, that they were to be notified confidentially in order that the health officer might take steps to see they were brought under proper treatment?—Yes; but I do not think the woman would necessarily know she had been notified; I mean, she would not know she had had syphilis, for instance. The doctor would not tell her that. All she would know would be that he had made some sort of test of her blood—pricked her finger and taken blood, and had it tested. The result would not be known to her, for fear of upsetting the home. That is what I mean by being anonymous.

9423. But I suppose no one who went to the hospital would feel certain of the secrecy, would they?—I think I suggest that they may go to some hospital where nobody else could see them. If they were seen to be going into a venereal clinic they would be known at once.

9424. The hospital treatment would really make it impossible for the patient to make it absolutely certain of secrecy?—Yes; I suppose he would always be very suspicious.

9425. You wish to establish venereal clinics in all districts, and call them by the very attractive name of "National Health Institutes." Those, I suppose, would be attached to and would be special branches of

all the general hospitals?—Yes, there would have to be some sort of out-patient department.

9426. Some sort of special out patient department?—I was thinking more of places a long way off general hospitals. They might be 50 miles off perhaps in country districts. I do not know how that would be managed, but such departments would be probably under the supervision of the medical officer of health.

9427. Towns are the principal centres of disease, are they not?—Yes.

9428. But you would establish some of these National Health Institutes in country districts?—Yes.

9429. They would be a sort of evening dispensaries?—Yes, some sort of dispensaries.

9430. What would you do in order to enable those institutes to carry out their work? Should they be able to test anybody or only treat after the testing is done by some central institute?—It depends what sort of laboratory is attached to those particular dispensaries. All that might be necessary would be to have some blood taken from doubtful patients and to have a Wassermann reaction done, and in that case the blood could be forwarded to the nearest laboratory.

9431. Then if the reply came?—Then if the reply was positive, it would mean the salvarsan treatment.

9432. So that all these institutes would have to be equipped with people who could be trusted to give the Salvarsan treatment?—Yes, certainly.

9433. And who might have to have special instruction for the purpose of doing it?—Yes.

9434. I suppose at the present time we have hardly enough people who might be said to be sufficiently instructed to give that treatment with safety?—They would want some special instruction in it now.

9435. To keep the secrecy in the cases of the people attending these National Health Institutes you suggest they should be known by numerals, and not names, on their attendance cards so that the clinic is not to know their names?—I thought that would probably be the best thing to encourage people to come.

9436. The people of the institute should not know who they are?—That is so.

9437. Do you think it would be a good thing to make it compulsory, if possible, that all patients diagnosed as having syphilis or gonorrhœa should have printed forms given them telling them exactly the dangers of these diseases and the absolute necessity for treatment?—Yes, I think it would be a great advantage, except to married women.

9438. In your lecture you allude to a question I have not asked you on yet, that is the need of a change in the secrecy of the death certificate as far as the cause of death is concerned. Do you consider we want a change of that kind to make the death certificate more accurate?—Yes, I do, because it is extremely difficult to be truthful if you have a child dying of syphilis a few weeks after confinement.

9439. Do you think the law would make for truth?—If a doctor felt that he was not going to upset the family, and the happiness of the family, by giving the husband a death certificate to that effect, he would give it. But the contents of the certificate might get known, or perhaps a copy might be wanted for some other purpose, and the cause of death might be put in the copy. It would be much better if he had the power of making an ordinary death certificate to certify the death merely, and then be allowed to send a duplicate, adding the cause, which not having been given in his first certificate, he would be bound to give afterwards to the registrar.

9440. You would practically let him make a special report to the registrar?—Yes, I do not see how it would be secret otherwise. Then the first certificate merely giving the fact that the patient had died would be enough for the insurance companies, and for probate, &c.

9441. And for the family?—And for the family. You see among the causes that we are supposed to give in some of these early deaths are, "premature birth and congenital defects," and, another, "atrophy, debility, and marasmus." They are very convenient terms to cover it, and the large majority of doctors would avoid

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putting in syphilis if some of these others were fairly accurate. Sometimes the registrar would write and ask for further particulars. I have known that done. Then the doctor can quite easily give further information, and there is no danger of the family getting to know of it.

9442. There would not be any very great difficulty, would there, in making such a return on a private note to the Registrar-General, at all events, marking a simple or a coloured card, or something which would indicate to the Registrar-General that the death was from venereal disease. Do you think there would be any very great difficulty in that?—No; I do not think there would be any very great difficulty if it were generally understood amongst the doctors.

9443. (*Dr. Newsholme.*) With regard to the table on page 4 of your lecture, you yourself have pointed out the possible fallacy in stating the proportion of abortions to be four times as many as still-births. That is after the 7th month?—Yes.

9444. That is, women who are in the habit of miscarrying are more likely to come to these physicians than women who are not in the habit, so to speak, of miscarrying?—Yes, I think that is so.

9445. You pointed that out to the Lord Chairman?—Yes.

9446. Therefore, it may be that the proportion of still-births to abortions, 1 to 4, is higher in this series than they would be in what we may call a normal series of still-births?—Yes, I have no doubt that is so. I think I mention that.

9447. You mention that yourself; but I wanted it put more clearly. If that be so, then it would follow that possibly the total number of deaths before births is not so great as your estimate would make it?—But my four times as many would bring it up to 8·8 per cent. for abortions, the still-births being 2·2 per cent., and these estimates from the doctors are higher: 23, 13, 16, 19, 30, 27; 8·8 per cent. is a much smaller rate.

9448. At any rate we both agree that the one thing which is wanted most of all is further facts?—Yes.

9449. And we cannot get that until those investigations, to the importance of which you have drawn attention, are made?—Yes.

9450. But, taking the basis of which you have assumed, then the infant mortality before the period of full birth is as high as it is afterwards?—Yes.

9451. And that being so, the total mortality during intra-uterine life, and in the first year after birth, means that one-fourth of all the possible children have died before the first birthday is reached?—Yes.

9452. That is a tremendously high proportion?—It is.

9453. And it shows the very great seriousness of the problem?—Yes.

9454. Then on the first page of your proof, you agree that syphilis is the main cause, both of early intra-uterine death and still-birth, but in giving evidence you have some little doubt as to the use of the word "main" in regard to abortions or early intra-uterine deaths?—Yes; we have not proved it so far as I know.

9455. Sir Thomas Barlow was giving evidence here a week or two ago, and he, in answer to a question, stated that, in his opinion—and he was careful to add that it was only an impression—probably one half, I think I am right in saying he stated, of the miscarriages were due to syphilis. You would be inclined to confirm that, I think, taking now the miscarriages or still-births?—Yes. In the absence of scientific proof one way or the other, that is one's impression, that a woman who has had syphilis at some time has a series of miscarriages, and very often no live children at all.

9456. The evidence, I think, is very discrepant; I have here, for instance, the report of the maternity department of the St. Mary's Hospital, Manchester, which gives you particulars of the apparent cause of death of 57 children born dead at term, and of those there is not one which appears to indicate congenital syphilis. There is placenta prævia, prolapsed cord, transverse presentation, accidental hæmorrhage, craniotomy, forceps, breech, ruptured uterus, and so on, but

not one that indicates a death at term which was due to syphilis?—Yes; but may I point out that those are emergency cases who come to the hospital for definite treatment to be confined because of obstetrical complications; they are not cases that have already had a still-born child at home prematurely. Still-births are almost always premature, and they would not be affected by that sort of thing.

9457. That is quite right; but, on the other hand, taking the statistics of the Queen Charlotte Hospital in London, I find these figures go much further than even those percentages. 119 children in this year were born dead, or died after delivery. These 119 cases were made up as follows:—Macerated and died before labour 59; died during labour, 19. That is to say, out of 78 still-borns, 59 were macerated. I should like to ask you whether you think that is an excessive proportion of macerated infants out of so many still-born—59 out of 78?—One must remember that at Queen Charlotte's Hospital they take in illegitimate cases. I think that is probably largely the explanation.

9458. May we also take it that the majority of these macerated infants were infants who were suffering from congenital syphilis, or is there any other cause of maceration with which I am not familiar?—The cases I was alluding to were cases of the macerated fœtus. For instance, Dr. Eardley Holland out of the first 7 cases he examined which were cases of macerated fœtuses, found 6 of them had spirochæta pallida in their livers and so on, and of his next 18, 12 of them were thus infected. That is a very large proportion—72 per cent. in the two series.

9459. You have already referred to the enormous mortality in the first week of life. That mortality, as you are aware, varies greatly in different parts of the country. For instance, I have here in my report to which you referred, on page 27, the statement that in Dewsbury, for instance, one out of every 24 infants born alive dies in the first week; and going to the other end, in the neighbourhood of London, Leyton, Tottenham, and Edmonton, only one out of every 50 dies in the first week; in other words, twice in Dewsbury as many infants born alive die in the first week of life as in the working class suburbs of London. Do you think that would throw any light on the relative prevalence of syphilis in those two areas?—Of course part of that might be due to neglect after birth in industrial centres.

9460. Quite. I want to get out, if I can, your idea as to the proportion between deaths from syphilis in the first week of life, and deaths from other causes. Would you agree with me that deaths from other causes bulk much more largely than syphilis. In the first week of life I am speaking of?—I could not say. What I would say about that is, that if a child was syphilitic, it would require such a vast amount of care to keep it alive for a few weeks, that it is much more likely to die than other cases. Of course a good many of the cases that die soon after birth, die because they have had difficult labour.

9461. And it might be the result of the application of forceps, or in other cases, from neglect of forceps when there has been very long labour. I suppose those are the causes why deaths bulk somewhat largely in the first week of life?—I do not think the statistics of the Registrar-General point to accidents in labour causing many deaths.

9462. Not in the statistics, but I think you will agree with me that it is not likely a doctor who uses forceps will put down "death due to forceps"?—As a matter of fact, the use of forceps generally is more likely to save the child's life, unless it is done much too early in the labour.

9463. Again, he would not be likely to put down "protracted labour due to not interfering"?—No.

9464. It is a very difficult point, I am only trying to ascertain whether one could get any rough idea as to the proportion of syphilis as a cause of those enormous variations, and other causes of variation?—May I say, with regard to that, if a child is born prematurely it sometimes may just show a little sign of life, but if it had lived another week or two the disease would have gone further and it would have been born still-born

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and then that premature child, born a little too early perhaps, would die in the first few days after labour. I think a fairly large number of them are probably syphilitic.

9465. I agree a fair number; but it is impossible with our present amount of information to say what proportion.

9466. With regard to the question of the registration of still-births and the cause of still-births, you are well aware that in the case of these deaths in the first week or first month after birth, the cause of death is very imperfectly stated by the practitioners?—Yes

9467. Would not it be still more imperfectly stated with regard to still-births?—Yes, it would be largely impossible without scientific examination.

9468. And unless you combined with this compulsory duty the further duty of a pathological examination, would you get very much useful information from the compulsory registration of the cause of death with the still-born?—You would not immediately; but generally, as our knowledge becomes perfected, we are able to point out to the students who are learning, the significance of different conditions which they could see with a very slight examination, gummata in the liver and so on, some of which we now know; but if these were uniformly examined, and not one or two cases a year at a hospital, we should soon get to know just as much as we do of ordinary diseases.

9469. You know at present the doctor is not paid for the certificate of death?—No.

9470. If you propose the additional duty of putting down the cause of death of the still-born infants, that would not be very popular?—No doubt doctors would much more appreciate giving certificates if they were paid for it.

9471. And you would be much more likely to get complete results?—Yes, that is natural. Of course, doctors do often get something for notifying diseases of different sorts now, do they not? It is often more trouble to them to make out the cause of death in an obscure case than to notify a case of infectious disease.

9472. With regard to the notification of abortions and every form of foetus, about what month would that begin, the third or the fourth?—The embryo is sufficiently formed to recognise a foetus in the second month, or even earlier, if one knew what to look for.

9473. You would like to have all those cases notified?—Yes; it would be a very great help from the point of view of scientific knowledge.

9474. And you would make it a compulsory duty?—Yes, I would like it to be.

9475. There again, unless it were also a compulsory duty on somebody to utilise the information given, would you get much value out of that notification?—No, unless you are going to have the specimens examined properly. It was my idea that the panel doctor or the midwife should notify the medical officer of health, and it would be examined scientifically.

9476. So that would not you rather put in the forefront of your programme the provision of arrangements for examination of these conceptions?—Yes, that is a part of the research.

9477. Would you put that in the forefront, and then when you had your arrangements ready you would possibly think of inviting these specimens, and finally making it compulsory to send them. Would not that be the natural order of things?—My idea was that if a case was notified to the medical officer of health, it would have to be done within a certain number of hours if possible, and he would take measures to get this specimen brought to his laboratory, and would then give instructions or send a chart on which to give the history of the specimen.

9478. You know, of course, that in the majority of cases these products are destroyed as quickly as possible?—Yes, I know.

9479. And if they were destroyed before the medical officer of health came on the scene, there would be no good result from the programme, would there?—No good at all.

9480. Therefore, some means would have to be taken to prohibit that, would it not?—Yes.

9481. With regard to the notification of pregnancy to the panel doctor, I cannot find in the Insurance Act there is any regulation to that effect?—No, there is not. I only meant, inasmuch as a woman got maternity benefit, it would be useful to the Insurance Authorities if the pregnancy was notified, for they would then know when the maternity benefit was due, and the payment would be made perhaps more immediately after the birth.

9482. You are familiar probably with the working of the maternity charity at the Charing Cross Hospital?—Yes.

9483. I suppose the mothers come up to the hospital when they are about seven months pregnant?—Sometimes earlier, four, or five, or six months.

9484. To book their names and secure attendance?—Yes.

9485. As soon as they come up, is it not a fact that they are questioned by the almoner, and I believe, as a rule, examined by a doctor afterwards?—Yes. As a rule they come before the house physician or the registrar or the assistant obstetric physician, and questions are asked, and if they have had children before, and there has been no trouble, all that would be done would be to have their urine examined.

9486. Does not that give an admirable opportunity for setting going the machinery you are thinking of; you could get an examination of the blood, for instance, at that stage, if it were indicated?—Yes, but that would be done now. There is no difficulty in that. It is the women who do not come to the general hospitals to be registered.

9487. My point was that, if one could get it going in connection with all the maternity charities throughout England as a first step, it is a very valuable and important first step for subsequently getting it done for the rest of the births in this country; I do not think it is regularly done in all the maternity charities, even in London?—I should think it was at the teaching hospitals.

9488. Does it go so far in suspected syphilis as taking a Wassermann when needed and providing syphilitic treatment when needed?—I think it would now, because we have been talking about it so much. I am not sure it has in the past. Until we had a Wassermann test we could not find out.

9489. But now may we take it in the great London charities connected with the teaching schools, anti-syphilitic treatment would be given if indicated for the thousands of women who attend in connection with these charities?—Yes, I have no doubt that that is so.

9490. You have no doubt that is so at the present time; and, if so, is not that a very important advance on what was previously the case?—Yes, it is.

9491. There are similar charities in various large towns, and you would recommend the extension of that to those large towns?—Yes, in places like St. Mary's Hospital, Manchester, for instance, I have no doubt they have some supervision of the women who come to them. They are registered as they are in London Teaching and Lying-in Hospitals.

9492. You know that throughout the country in many towns infant consultations have been started for the attendance of women and their infants in early childhood, and these are being supervised by medical women?—Yes.

9493. Would it not be a very good thing in maternity centres to have consultations with the women before the birth of the baby as well?—Yes. I have put in my pamphlet that I think it would be of very great importance.

9494. There is a large amount of sickness during pregnancy which affects not only the mother, but the baby?—Yes.

9495. And that ought to be treated at the very earliest possible time?—Yes.

9496. And further, I take it you agree it is an artificial separation which ought not to be continued, to have consultations for infants and not consultations for mothers when they are carrying the babies, and that the same consultation centres ought to be applied

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to both periods?—Yes, and mothers should be encouraged to come. May I pass round, Mr. Chairman, a list that I have drawn up of cases of ante-natal disease, showing how useful maternity supervision would be.

9497. You allude to the importance of pre-maternal wards, in which I quite agree, but these maternity centres where women could come up who were not very ill would be almost as equally important. Where they come up for out-patient treatment, you would regard those also as very important?—Yes, certainly, people who did not require ward treatment would be able to come up to the out-patients department.

9498. As to these laboratories to which you have referred and which you say should be in connection with various big hospitals, they are really laboratories for the prevention of disease, are they not?—Yes, ultimately.

9499. And in the same laboratories you would have other public health work going on?—No doubt.

9500. And you would consider it very important that these laboratories should be endowed by public funds?—Yes. As regards our London hospitals, the men who work in the laboratories are so overdone with ward work, and increasingly overdone, that one does not see how they can extend their work without financial assistance.

9501. They might be very interested in these for six months or a year, examining a large number of fetuses, and then at the end of that time, having got all the information they wanted, they might cease work; whereas if this were made part of the official machinery, they would be much more likely to continue it permanently?—Yes, that is so. Of course, that may simply mean they would be able to recognise the various diseases which cause ante-natal death more rapidly, and they would have more time at their disposal for other things.

9502. You would regard the advantage of an additional maternity benefit to be in the fact that you would get more supervision over these matters?—Yes.

9503. And that is why you would justify the additional 5s.?—Partly, and partly also because it would be a great boon to a woman if she knew she was going to have another baby, and she knew she could thereby afford some sort of financial help. 5s. a week to a poor woman would mean a great deal of assistance.

9504. Have you worked out how much this additional 5s. would make?—No, I have not; I know it would be enormous—double the amount of the maternity benefit, perhaps.

9505. The cost for the maternity benefit last year in England was over one million, and I think your additional benefit would probably be two millions more; I am not sure, but it would not be very far off. That is not two "Dreadnoughts," is it?—No.

9506. With regard to gonorrhœa, ophthalmia neonatorum is one of the most terrible results of that, is it not?—Yes.

9507. Now, I want to ask you this question for my own information. Is it possible to diagnose that disease before purulent discharge begins, or does the purulent discharge begin very quickly?—Are you speaking of women or children?

9508. I am speaking of the baby who suffers from it?—I suppose the conjunctival secretion would show the gonococci; but I have never known it examined until it begins to become inflamed, and discharge comes from it. That may be two, three, or four days.

9509. It is usually about the third or fourth day, I believe?—Yes, or the fifth day.

9510. And by that time would there not be some purulent discharge?—Yes, that would come almost immediately after the first signs of inflammation.

9511. So that there would not be any likelihood of getting cases notified before this discharge had begun?—No.

9512. I agree. With regard to the modification of venereal disease, I think it ought to be pointed out to you that notification of small-pox is confidential, and unless you withdrew the name, I do not see how you could make the notification of syphilis more confidential than that. So that really your suggestion of

confidential notification must, I think, mean notification without the name of the patient. The medical officer of health is bound to keep secret the notification of small-pox or scarlet fever. I admit it does sometimes leak out?—Do patients know they are going to be notified?

9513. Yes, they know?—I suppose they would get to know the other too.

9514. Personally, I do not think that any notification of syphilis with names can be more confidential than notifications of small-pox. That being so, would you advocate the notification of syphilis?—Well!

9515. It is a very difficult point, is it not?—It would be the best way to get rid of it, certainly, if it could be universally adopted with anonymity.

9516. (*Sir John Collie*.) I take it that all your valuable suggestions with regard to the pathological investigation of still-births are dependent upon the existence of efficient methods for diagnosis and subsequent treatment of syphilis?—Yes, we shall not get to know anything more about these points until we have this research.

9517. With regard to notification, have you considered the effect of the medical officer of health sending an inquiry agent, or inspector, to houses in, say, a very poor district, having in view the fact that these men are not always diplomatic individuals, and that there is not much subtlety about their methods. Do not you think that the neighbours would inevitably begin to suspect the nature of the visit, especially if he wore uniform?—Are not there a good many district visitors now who visit people after their confinements? I do not think they would be necessarily suspicious of it. If there was a lady doctor, for instance, without uniform, I do not think it would create any disturbance.

9518. You do not see any difficulties with regard to the inquiries that might be made that would necessarily follow the notification of the disease?—Supposing, for instance, the spirochæte were found in those macerated still-births, there would be no necessity to ask them any questions that would make the woman suspect. Treatment is necessary. I think the question is whether the husband should be treated too. Probably he should be.

9519. Some steps, I take it, would have to be taken with regard to approaching the husband?—Yes.

9520. Do not you think that, coming from a public authority would at least negative the idea of any secrecy?—In that list that I have sent round there are a large number of other cases besides syphilis which may produce ante-natal disease and death, and one is as important as the other in one way.

9521. I was thinking more of the curiosity of the poorer people with regard to the open way in which they live. If an inspector called from the medical officer of health after a miscarriage, I think they would be apt to put the worst construction as to the occasion of the visit?—Tuberculosis, you see, is another cause. We are not sure how many abortions are due to it. They might be inquiring about that too.

9522. I quite see there may be very many causes, but I am thinking of the practical effect of your suggestion that notification should be secret, notwithstanding the fact that a subsequent inquiry would follow any notification?—Yes, I see the point.

9523. Do you not think this would happen; that it would in a large number of cases prevent people sending for a qualified medical man, especially at the early stages of the disease, and that they would resort to quacks, and the infectious disease would then spread largely at its infectious period?—Yes, that is apart from pregnancy.

9524. Apart from pregnancy, of course. I am thinking of the notification as a whole, besides your particular branch?—That is why I was hoping it could be managed to be secret.

9525. You see the difficulties?—Yes, I see the difficulties.

9526. (*Canon Horsley*.) With regard to what has been mentioned by Sir John Collie, would it not be partly met if, instead of sending an inspector, the

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doctor simply sent to the husband and said, "Will you kindly come and see me"?—Yes.

9527. After all, in most cases he would inform the husband?—Yes.

9528. He would say, "Your wife has been ill; we have discovered there is a certain disease," and then talk to him about it. I suppose it is the husband you want to get at more than the wife in that case, is it not?—Yes. Of course, one wants to get both really.

9529. That is the way a good many of the difficulties might be removed; simply by not sending anyone to talk to the wife, but asking the husband to come and see the doctor in the evening?—Yes. I know Dr. Eardley Holland, who is examining cases now, not only examines the fœtus and the placenta when he can get it; but he sees both the husband and the wife, independently of course, and quite tactfully he finds out if the woman has had or had not symptoms, and then, if need be, he would speak quite plainly to the husband.

9530. I have had 17 years working with a medical officer of health in a borough, and I know he can do a great deal by asking people to come and see him. He does not necessarily send a man with a uniform. He says: "Come and see me." With regard to these two hospitals you are connected with, do either of them give those cards of instruction, saying you have syphilis and what you are to do?—No.

9531. Why not? I think you said you approved of them and that they were good things?—Certainly in venereal clinics; but you see these people come so rarely to the hospitals.

9532. They do not come much with that disease?—No. In the Samaritan Hospital, where we only see women, comparatively only a few would have syphilis and a few would have gonorrhœa, and you could not possibly go and give a married woman a card as to how to treat gonorrhœa, for instance.

9533. At Charing Cross you have not much syphilis? Yes, the males come sometimes for syphilis, and those are the ones it would be useful to give these cards to.

9534. But you do not, as a matter of fact, give it? No.

9535. You know they do at some hospitals?—Yes, they might do it at the Lock.

9536. And at Guy's?—I am speaking of married women in particular. You could hardly give cards to them.

9537. It seems to me such a useful step, that I do not quite understand why some hospitals have adopted it and all hospitals have not where they have that disease to deal with?—I do not know that they have adopted it anywhere except at Lock hospitals.

9538. At one of the first meetings here I brought up a printed card in use at Guy's, copied, I think, from one started at the Lock. It is given, of course, in the Naval and Army hospitals?—Yes.

9539. With regard to these suggestions for supervising and helping financially pregnant women, of course this only referred to quite a small minority of the women of the country, and those were insured under the Insurance Act?—Yes.

9540. It would not affect those whose husbands were insured only, would it?—Yes.

9541. Even then that leaves a great many out that ought to be helped?—Yes. It would affect all those who now get a maternity benefit.

9542. Yes; but not every woman whom we should like to help?—Unless she was insured.

9543. On the question of free maternity wards provided in every lying-in and general hospital, that would mean a very considerable amount of bricks and mortar?—They are beginning to have, pre-maternity wards in a good many cases. At St. Mary's Hospital in Manchester they have, and also in several Glasgow and Edinburgh hospitals.

9544. And in London hospitals?—Yes, in a few of them. St. Thomas's and the London have, and no doubt others.

9545. Have you room?—It does not mean many beds. At the most there are four beds perhaps in the pre-maternity ward, and in cottage hospitals just one

bed would be reserved in case it was wanted for some pregnant woman.

9546. Then with regard to the financial assistance for pregnant mothers, that, of course, rather deals with the question of infantile mortality than with these special diseases we are talking of here. I should like to have that for all expectant mothers; but, of course, what we are dealing with here is what to do with those who are affected in a particular way?—Yes; and we do not know yet what proportion of the women who require pre-maternity treatment are suffering from venereal disease.

9547. How long would you have that assistance to be before and after?—If they were women that had been affected for some time they would merely have the salvarsan treatment without going into the hospital for more than a day.

9548. And this financial assistance as well, going on after as well as before?—Yes, they would have still the maternity benefit, and perhaps sickness benefit both before and afterwards, or they would also have some sort of financial help during the last few weeks.

9549. Roughly, how far, if you had your way, would you withdraw the mother from active work and give her the benefit of financial assistance? For what period?—During the last three months of pregnancy and the first month afterwards.

9550. The rule in Switzerland is six weeks before and six weeks after. Women that are working in factories and so on, are not allowed to work for six weeks before or after. That seems an average sort of time. The difficulty about this financial assistance which I should like to see given to all poor mothers is, that in our view, it would only come to certain ones who had been found to have had disease. It is not part of our business here to say what ought to be done for the benefit of all women. It is not an infant mortality commission?—But it is rather another inducement to them to get their pregnancy notified, and then this will be discovered amongst other things.

9551. Of course, it would be, as you pointed out, an enormous cost, would it not?—Yes.

9552. But it would be a recuperative cost?—Yes.

9553. (Dr. Mott.) You gave some statistics which seemed to show that the earlier cases of abortions, which might even be called miscarriages by the patients themselves, were not due to syphilis as a rule?—Yes.

9554. Yet, I think you will agree with me, that if you take the history of a syphilitic child, you will often find that the mother will tell you she has had one or two miscarriages, and then a child born dead?—Yes, that is so.

9555. And then a child dies in the first year or so of meningitis or convulsions, or some other disease. So that a considerable number of those cases probably, if they were syphilitic, would be miscarriages—called by the patients miscarriages. Does that mean, do you think, small fœtuses macerated, or does it mean something even less than that; that is to say, death in the first month or two?—Hitherto we have thought that those were due largely to syphilis, that they were another aspect of syphilis rather earlier in the mother's history, perhaps.

9556. I must say that has been my experience from a very large number of histories, that a considerable number of them showed early miscarriages and then abortions, and then children born dead?—But when we come to scientific proof and they cannot find the spirochæta, then, of course, one has to hold one's opinion and await scientific proof. Why should not the spirochæta be discoverable in these early ones?

9557. Do you mean to say, supposing they took a woman who is known to be syphilitic, and she had a miscarriage, they would not find the spirochæta in that early miscarriage?—That is what available evidence seems to show.

9558. I think they would?—I should think they would, too; but I have been looking up and trying to find references, and I cannot find references that they can find it in abortions to any great extent. (See

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9351-6.) That is one of the things I want the research to do.

9559. Because there are a great number of abortions that are not caused by syphilis; but where you have this definite history of syphilis in the mother, and the miscarriage comes two or three months afterwards, have you not any statistics with regard to these?—No. At least, I cannot find any. That is why I want all abortions to be systematically examined.

9560 All the evidence seems to show that must be so?—All the clinical evidence, yes.

9561. You remarked upon the number of cases of syphilitic fetuses in the infirmaries. About three years ago, when I was using the Wassermann reaction, it was necessary to have sufficient livers of fetuses, so I wrote round to all the infirmaries to ask them to send them to me. I only got one infirmary to respond to my appeal. They sent me a good number from the Shoreditch Infirmary, and in all the cases I have been able to find the spirochæta in the tissues as you mentioned, and occasionally in the blood of the umbilical cord too; but I have no doubt that a vast amount of valuable material from these infirmaries could be obtained, judging from that which I have already received from the Shoreditch Infirmary. I think that is a very valuable suggestion. Do not you think it would be a very useful thing to have a Wassermann done on the blood taken from the umbilical cord of a series of lying-in women?—Yes, that is being done to a certain degree at Charing Cross now. A Carnegie Scholar, I believe, is testing a good many umbilical cord bloods.

9562. But you cannot get very many cases there, can you?—I mean the blood of any child can be taken from the divided cord before it is tied.

9563. You would not have many cases at Charing Cross, would you?—In the out-door maternity, yes.

9564. But comparatively, I mean?—No, not very many.

9565. It is a useful thing?—Yes, it is, and it could be done at lying-in hospitals everywhere, of course.

9566. Then with regard to Colles's law. I share the opinion, and the growing opinion I may say, that the immunity of the mothers in Colles's law and the child in Profete's law is only apparent. The disease is latent, I think?—Yes, no doubt in some cases.

9567. And I do not really think that your arguments, with all due deference to you, outweigh the opinions of Neisser and others, who give very strong arguments in favour of it being latent syphilis. I mean the experimental work of Neisser is very much in favour of that. Moreover, a number of Wassermann reactions have been done on mothers who show no signs whatever, and the children are syphilitic, and they find that the proportion giving a Wassermann is as great as those where there is obvious syphilis?—I thought it was rather the other way; that there are a large number of negative Wassermanns in these women who showed no symptoms, and yet have syphilitic children, and that these women are negative during the pregnancy and become positive a month afterwards. That is one of the most difficult things to explain.

9568. You attribute that to the passage of antibodies from the fetus?—Yes; I think that is the most likely explanation, that the women are immune, unless McDonagh's theory is correct as to the spores.

9569. They are immune because the organism is already in the body in a latent state. I mean that is the view with regard to the possibility of the explanation of re-infections. The organism has been eliminated from the body, and, therefore, they are capable of re-infection?—Exactly.

9570. With regard to McDonagh's intra-cellular parasites, are you aware of any biologist of note who has confirmed these statements?—I was talking to him a few days ago, and asked him that very question. He told me that some Spanish authorities and some Vienna authorities had accepted his views quite recently, and his arguments are really very strong. He has a large number of facts which seem to point to its being true; and, although I do not think it is

published yet, he showed me a proof of a pamphlet on the biology of syphilis, and it is very interesting.

9571. It is very interesting; but I have spoken to a good number of biologists, one of whom has worked at the question for a number of years, and is quite an authority in England on spirochæta, and he does not accept it?—I know that is the tendency in this country.

9572. It is a tendency abroad, too. The difficulty is this, that if the spirochæta is a protozoon, which it must be according to his theory, there is no head and tail to it. It is the same one end as the other; so it is an unusual form of protozoon. Still, you put it forward simply?—I am not an authority on that at all.

9573. Then may I ask you this. If a married woman came to you and you discovered she had syphilis, would you tell her the nature of her disease if she asked you?—No.

9574. You would not?—I never have.

9575. You do not think she has a right to know?—She has a right to be treated for it.

9576. But has she not the right to know the nature of the disease?—I think the doctor is bound to secrecy; but there might be occasions on which one would have to reveal the fact.

9577. If she asked herself?—No, I do not think I would.

9578. Why not?—She could be treated probably just as well without knowing. Of course, such a revelation would necessarily lead to divorce or what not, if you did.

9579. But supposing she went to another doctor?—I am thankful to say I do not get very many cases of syphilis in women. They go to surgeons more. Generally the husband gets to find out there is something wrong with his wife, and knowing what his own history is, he takes his wife to his own doctor.

9580-1. But there are lots of cases where women do not know, are there not? Supposing you had a syphilitic child to deal with, and there were other younger children born, what would you do in such a case? Say you discovered a late form of syphilis in the child, and the mother is pregnant?—I should speak to the father.

9582. You would then?—Yes; but I should not tell the mother.

9583. But you would have to treat the mother?—Yes, and the husband would probably arrange that that could be done.

9584. Do you think venereal diseases are inadequately taught in the medical schools at the present time?—Yes, they are inadequately taught. There is no system or routine in the matter. If a casual case turns up in the out-patient's department, a little clinical lecture might be given on it, but there is no series of cases.

9585. Do you think they are inadequately treated if they are inadequately taught?—No, I should say they are adequately treated, but they are in such small numbers.

9586. Then the students have not the opportunities of seeing them?—No.

9587. Could you suggest any way by which the students could be better taught, because it is a very important matter?—I think if there were some definite departments to which these cases could come, especially in the evening; but the difficulty is that in the ordinary way the students would not be there in the evening.

9588. That is one reason why you would advocate these clinics being associated with the hospitals, rather than separate institutions?—Yes, I think so.

9589. But you do not think the students would come. Could not you suggest any way?—Yes, a good many would come if there was something to come for, if there was a series of cases.

9590. Do not you think if they were examined upon it they would come?—Yes, the examining bodies required certificates of instruction in venereal diseases.

9591. I mean to say, as soon as the students are examined on a subject, they pretty soon look it up and attend properly?—Yes, it would be a great help to make them come.

9592. Especially if the new idea of the University were carried out, of the examination commencing when

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the student enters the hospital, according to the way he did his work?—Yes.

9593. (*Mrs. Scharlieb.*) Supposing we take it for granted you are morally right in not informing the woman, do you not think that a great many women nowadays would understand quite well, if first of all you had their blood examined and subsequently you gave them a course of treatment, whether it was mercurial inunction or salvarsan or anything else?—Yes, I think so; and I should make no objection to it if they found things out in the ordinary course of one's professional work. That is quite a different thing. But to give or volunteer a statement which would upset the family's happiness, I should avoid as far as I possibly could.

9594. It has been put to me point blank quite recently. "Have I gonorrhœa or have I syphilis"? What would you do if that were asked you point blank?—I do not know that I have ever been asked point blank.

9595. I think if you were a woman practitioner, you would be?—I might be.

9596. It is a very difficult position?—It is.

9597. I wanted to know how one ought to deal with it?—Well, if one had to deal, for instance, with a case of gonorrhœa (gonorrhœal salpingitis) years after the infection, she might ask you, but you could easily put it off and say she has some inflammation. There is no object in telling her more than that.

9598. No, none. I was thinking very much more of the difficulty of administering salvarsan or proper mercurial inunction. It is very much more likely to give the case away to the woman, is it not?—It is. I have known many cases where the giving of mercury has given the case away. But that is another question.

9599. So have I. Do you not think that we must be exceedingly careful if women come to notify their pregnancy, and therefore enjoy certain benefits, to make it perfectly clear to them that unless there is some practical reason, they will not have any internal examination; because, as perhaps you know, there is an agitation going on in a paper called "The Suffragette" or "Votes for Women," saying that doctors are again plotting against women, and that they are proposing that every poor pregnant woman should be examined simply for the purpose of teasing the women and putting them in a bad position?—If they have had healthy children before, there is no need to examine them internally; but it is more necessary in cases of contracted pelvis. If a woman comes in who looks rickety, or otherwise deformed, she certainly ought to be examined; but as regards the routine examination of every woman who comes to register herself to be confined, I should say certainly not.

(*Dr. Newsholme.*) Would you mind asking how it is to be known that a woman has not got contracted pelvis. It is the first time she has come.

9600. (*Mrs. Scharlieb.*) Yes. Supposing it was the first pregnancy, you might have to examine then?—By putting the hands on the crests of the ilia you can tell roughly what sort of pelvis it is, and whether it is contracted.

9601. Would that suffice?—That would suffice to begin with, but further examination might be required.

9602. Then with regard to education, is it your opinion that the whole nation requires educating—the public, medical students, and doctors who have been educated, say, perhaps 15 or 20 years ago, and not had the advantage of the men of the present day?—Yes, I think the whole nation requires education.

9603. Do you look to that to pave the way for all these very desirable requirements?—I should like to see them all running concurrently.

9604. May I ask whether you do not think the weekly boards and committees of management of hospitals, and also officers of poor law infirmaries, all require educating, and do not they require to be induced to give more facilities for treatment?—Yes, I think those who come into contact with the Poor Law people need more knowledge than they have.

9605. I think so, too, because we know that there are certain hospitals at this moment who are refusing to take men and women with venereal disease, and are refusing to take them into their out-patient department, or refusing to take them for a couple of nights to give salvarsan?—I did not know that.

9606. It is so. May I ask you, partly for the benefit of the lay members, about the question of gonorrhœa in woman. Would you consider it one of the gravest diseases that can attack a woman?—I think it is one of the gravest diseases, although it does not lead to death as a rule. They may get abscesses in the tubes and in the ovaries secondarily, and these abscesses may form adhesions with other organs in their neighbourhood, and sometimes open into them. Pus may thus get discharged into the bladder or intestines, leading to permanent sinuses, and the women would become chronic invalids.

9607. As an operating gynecologist, have not you found such cases furnish you with your most tiresome, difficult, and dangerous operations?—Certainly; they are the most difficult abdominal operations there are. The adhesions are sometimes so intensely firm that it is impossible to get them out without injuring adjacent organs.

9608. Then in that way they have led to death?—Yes; but it is astonishing how few do die under operation.

9609. But they are the efficient cause of operation which may lead to death, whether from the presence of the gonococcus or associated organisms?—Exactly.

9610. Therefore, gonorrhœa in the early part of its course inflicts upon the woman a loathsome ailment, subsequently it causes sterility, and, lastly, after years, it may lead to these operations?—Yes.

9611. Just roughly what percentage of the operations on a woman's pelvic organs do you think is caused by gonorrhœa or by the consequences of gonorrhœa?—I have not made any definite calculation, but I should think it runs to nearly 10 per cent.

9612. And gonorrhœa is unfortunately an exceedingly common disease?—Very.

9613. Is it your opinion that gonorrhœa in a woman which is carefully and adequately treated in its very early days is susceptible to cure?—Yes; in the early stages I think it is much more curable in a woman than in a man. I mean by applying strong caustics of nitrate of silver or iodine or pure carbolic over the parts that are already infected, one can very often arrest the infection within a week or 10 days.

9614. And is it also your opinion that we have now the means of making accurate diagnoses so that we can differentiate between gonorrhœal vaginitis or any other vaginitis or urethritis?—Yes, in the early stage; but observers in America have recently stated, and I think they were the first to state it, that in addition to the presence of gonococci, if the gonococci have ceased to exist as live organisms, there is in the dead coccus what they call a gonorrhœa toxin (gonotoxine), which is just as capable of producing inflammation in the same or in another individual, but not of reproducing the gonococcus.

9615. And the gonococcus sometimes becomes nested or encapsuled in the tissues, so that it becomes latent and comes back to activity with anything that flushes the part with blood, such as alcohol?—Yes, that is so, both in the Bartholini's glands, the urethra, and in the cervix, and probably in the tubes also.

9616. (*Mrs. Creighton.*) How would you oblige a woman to notify her pregnancy; by making her forfeit benefits if she did not do so?—The object would be so that if she had anything wrong with her—any of these conditions which are pathological—she would come under treatment for it.

9617. I understand your object, but I want to know how you are going to oblige the woman to notify?—I do not believe in compulsory notification of pregnancy, but I believe in voluntary notification as the next best thing to it, and the inducement I held out was that an insured woman would get something if she was in the last few months of pregnancy.

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[Continued.]

9618. Therefore it would be the promise of benefits that you would rely on as inducing her to notify?—Yes.

9619. And you would not wish to see any penalty imposed upon her if she did not?—No, I do not think so. It would be a sort of registration of the fact that she was pregnant, with a view of getting maternity benefits or any other benefits.

9620. Would you make the maternity benefit dependent upon that?—No.

9621. I wanted to have that quite clear. So that it would be an absolutely voluntary act on her part by which she might get greater benefits for herself?—Yes.

9622. But her failing to notify her pregnancy would not deprive her of the maternity benefit, or expose her to any penalty?—No.

9623. Then again with regard to the question of doctors not telling women that they are suffering from syphilis. I think the other questions that were asked rather supposed a comparatively well-to-do practice; but in some of your former answers you said if the fact that a woman had syphilis was discovered by the health officer or inspector, you would then treat her without her knowing what she was suffering from?—Yes.

9624. Do you believe that people might not rebel against being treated for a malady, the existence of which they were not told, particularly with such very strong remedies as are needed here?—Of course, a great many of these conditions which lead to ante-natal disease and death require treatment of some sort. She need not be told that she has been treated for one any more than another.

9625. But I gather that you, in common with others, look forward to a far greater knowledge on the part of the public with regard to all these matters. If with that knowledge the fact is known that medical officers and others can put women under this treatment without telling them what is wrong with them, do you not think that in a democratic country there would be a good deal of indignation at such a proceeding?—I think there would be far more indignation if it were found that these women could not consult a doctor with the assurance that he could keep things to himself and not spread them about.

9626. The question is keeping it from them?—Even that. I think it would be a very great pity. I personally should endeavour to keep it from a married woman as long as I could, knowing she could be cured probably just as well without knowing.

9627. Even if her condition had been produced by her husband's ill-conduct after marriage?—Yes; but I do not think one could be sure of that, could one?

9628. I suppose one could if she had had a healthy child in her early married life, and afterwards had a syphilitic child?—Yes; but it does not follow it would be the husband, does it? You would get into a nest of trouble if you are not a little reticent in these cases.

9629. Then I think I was right in understanding that you recommended two certificates, one for the family simply stating the fact of death, and one for the medical officer giving the cause?—Yes. I was speaking of still-birth.

9630. Only in cases of still-birth?—Yes, with the view of getting the still-birth examined, after notification to the medical officer of health.

9631. But would not you do the same thing in the case of another death that might be traced to syphilis?—Yes, I would; but the two certificates should then go to the registrar.

9632. But if you only had two certificates in some cases of death and one in others, would not that make people suspicious?—No, they would not know anything about the second one. The first one would be a statement that the child had died prematurely, or whatever you like to put, and there would perhaps be some little indication—a cross, or query, or anything—on the certificate to say that another one was coming, and then you would give the true facts to the registrar.

9633. You said in answer to another question that notification would be the best way to get rid of syphilis. Do you hold to that?—I mean to say those

cases that were notified would then be under treatment, and, as I say in my paper, the cases that were compulsorily notified without anonymity would be much fewer than those which were notified in secrecy. If it were possible to notify secretly, and the people realised that, they would go to the doctor; but if they thought their names would possibly come out, they would stay away as much as they could or go somewhere else.

9634. I think from your answers to Mrs. Scharlieb it appeared that latent gonorrhœa is capable of infecting a wife?—Yes.

9635. So that however long a man may have had it, or however much he may think he is cured, he cannot still be certain he may not be in an infective condition?—He may be quite certain in some cases. On the other hand a man may be mistaken. If, however, he has been to the doctor and the doctor has certified he is cured, and the doctor is an expert, I should assume he was cured.

9636. Can an expert be absolutely certain that a man is cured of gonorrhœa?—I could not tell you; but I have sent many a husband, unknown to the wife, to an expert in those things, and he has been able to assure me that gonococci are absent; so I presume you can be certain.

9637. (Mr. Lane.) The general tendency of your evidence is to the effect that education may check this alarming ante-natal mortality and mortality in the first year. I am not sure whether it was you, but I believe it was, who gave an example of this in the educated classes; that is to say, that the families of doctors show a far less mortality than those of any others?—That was taken from an address by the Right Hon. John Burns. I quoted it in my lecture.

9638. I have seen the statement; I was not quite sure whether you originated it?—It is on page 12 of my lecture. It is 40 per thousand, in doctors' families in the first year, instead of 150 in some other cases.

9639. You know that some American gives a percentage of 90 per cent. of sterile women married to husbands who have had gonorrhœa. That applies to American husbands, and it is possibly due to the greater prevalence of gonorrhœa there, but it does not mean that this 90 per cent. were sterile on account of the fact that their husbands had gonorrhœa?—No, I read Howard Kelly's actual words, quoting from Noeggerath's monograph. Kelly says "these views, though extreme, are, in the main, held to be true to-day."

9640. Then as regards the curability of gonorrhœa in a man, I admit it is difficult to say when it is cured; but you have been in the habit of sending husbands to specialists to get cured of gonorrhœa?—Yes.

9641. And they have returned to you with a certificate that they are cured?—My experience rather is that one very often sees a woman with recurring attacks of salpingitis after being married some years, and you want to be quite sure that the husband has not any gleet discharge going on, and I send them to an expert, in my case to Mr. Charles Gibbs, of Charing Cross Hospital. I find that generally he does not find any gonococci present. I assume therefore he is telling me the exact facts, and that those men have no gonococci in any part of their urethra.

9642. But he is encouraging the gonococcus to re-appear if it is latent?—I do not know whether he has made any test of that sort; but I suppose he would manipulate the prostate and vesiculæ seminales and see if gonococci could be found.

9643. But there is a certain procedure that the patient must go thorough, viz., massage of the prostate?—Yes. I have not made any exact inquiries into what he does. I do it for the sake of the women. I just write to the husband and ask him if he will reassure me on that subject.

9644. With regard to the treatment of syphilis, your opinion was that it could be, and was, adequately treated in out-patient departments?—I am not speaking so much of the salvarsan method, but in the old days treatment was quite sufficient.

9645. In the old days it consisted in prescribing pills and telling the patient to come again in three

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weeks or a month's time. But now for any treatment to be adequate, it must certainly be started by salvarsan injection, must it not?—Yes.

9646. Are those done in the out-patients department at Charing Cross?—I could not tell you for certain, but I have no doubt treatment is efficient.

9647. Then as regards the curability of gonorrhœa in women, you say it is more curable in the early stages in women than in men; but do you often see gonorrhœa in the early stages in women?—Not very often; but I see them within a week or 10 days pretty frequently.

9648. My experience is that they abstain from treatment as long as possible. You of course have come across cases of absolutely incurable gonorrhœa, in which a woman is constantly contagious?—Yes, especially when she has got a chronic endocervicitis.

9649. In hardened prostitutes, for instance?—Yes.

9650. They are very often quite incurable. As regards notification, you were asked to compare the confidential notification of small-pox with that of syphilis. There is the difference that small-pox is considered an ordinary disease, while syphilis would be considered a disgraceful disease?—Yes, that is so.

9651. That might be one of the reasons why people would object to notifying syphilis?—Yes.

9652. (*Sir Malcolm Morris.*) I have only a question or two to ask you about the question of establishing venereal clinics under another name. Do you think it is really practicable that clinics or dispensaries of that kind for the treatment of venereal diseases alone could be established in various parts of the country?—I do not know whether it would be possible. I believe there are tuberculosis dispensaries now. It might be tacked on to them perhaps in some way.

9653. Does not that rather tend to the multiplication of various separate institutes for the treatment of a variety of diseases. Does it not lead to rather a practical difficulty if we have a great number of institutions of various kinds all over the country for treating the disease. Do you think that is practicable?—It is an extremely difficult thing to do, I know; but I am afraid if they were established under any name that would imply what they were, people would not go at all.

9654. Do you think it would be a good idea to call it the National Health Institute?—Perhaps it was presumptuous of me to suggest a name; but I could not think of anything that would answer the purpose. That was more in districts a long way from anything like a general hospital.

9655. As a matter of fact, venereal disease is extremely rare in country places, is it not?—I do not know.

9656. Is not that your experience?—I do not know at all.

9657. We have had it in evidence that it is much more common in towns and large cities. Would it not be possible to develop the general hospitals and other hospitals that already exist so that those diseases might get adequate treatment there, rather than establish separate institutions? What is your opinion on that point?—Yes, if the people who need treatment are sufficiently near to be able to get there.

9658. Yes. Which do you think is the more feasible scheme?—I think where they are a long way off from any big town it would be a good plan to have something nearer.

9659. Supposing we are not dealing with far-off places, but those in cities. If the present institutions were properly developed, do you think it would be sufficient?—Yes, certainly.

9660. So that these health institutes you recommend are not for cities?—No.

9661. They are only for country places?—Yes.

9662. It has been suggested that the special department should be called the "genito-urinary" department. Do you think that is a good name?—Do you mean a name stuck up on the institute?

9663. Yes. It has been suggested in evidence by the surgeon of a big London hospital that the depart-

ment should be called the "genito-urinary" department. Do you think that would be a good scheme?—No. I think everybody would be assumed to be venereal that went there.

9664. Therefore, you do not think that name would be an appropriate one for the special treatment?—No.

9665. Do you think on general principles it is wise to have a separate department at all?—Yes.

9666. You do think so?—Certainly.

9667. From what standpoint?—Because it would be much more likely they would get an expert to attend to them, for one thing, and the students would get proper education there.

9668. There would be better teaching for the students?—Better teaching for the students.

9669. Would you have a special staff for the particular purpose of taking charge of that department?—Yes, one for males and one for females.

9670. Two special men at each hospital to take charge of these departments?—Yes.

9671. He would have to be an authority not only on special disease, but also on each department of the body which this disease might attack. Would he have to have a special knowledge of the eye as well as of genito-urinary diseases?—That would be a later evidence in syphilis, and he would refer it to the eye department, I imagine.

9672. So that they would be drifting from this special department to other departments on certain cases?—Yes.

9673. (*Sir Almeric FitzRoy.*) Does the success of your scheme of notification and medical supervision depend at all upon the competence of the midwife to detect or, perhaps, only to suspect the syphilitic taint?—I have not suggested that the midwife should have anything to do with that. I have said if the mother notifies she is pregnant to the midwife, the midwife should notify it to the medical officer of health, and he would make any investigation that was necessary.

9674. Then may I take it you do not attach any importance to the midwife being equipped with any such knowledge at all?—No, she could not be equipped with it as a result of her education.

9675. We have had it suggested in that chair that it is a desirable thing, but you do not think so?—That a midwife should practically become a doctor in venereal diseases?

9676. No; that she should be equipped with some elementary knowledge to enable her to detect, or at any rate suspect, the presence of a syphilitic taint?—Yes; she might have a little more knowledge on the subject than she has now, but in common with the whole of the nation.

9677. You think no special knowledge; because there are a large number of cases of child-birth that are attended exclusively by midwives?—No; I do not think I should like a midwife to be considered to be able to diagnose venereal disease.

9678. Not diagnose. That is rather too professional a term to use; but to suspect the presence of it?—Yes, if she was able to suspect the presence of it, well and good provided she was tactful and discreet; but she would not be able to do that without some sort of training, and that would add very much to her length of training.

9679. You think with the present period of training it would be impossible to give that instruction?—Quite impossible.

9680. Have you considered the ratio that intentional abortion bears to the whole amount?—No, I have no idea.

9681. Do you think it is considerable?—Yes, I think it is considerable. Such things as diachylon plaster, and that sort of thing, are taken largely in the North of England.

9682. (*Sir Kenelm Digby*) (in the chair): I had not the advantage of hearing the earlier part of your evidence; but there are one or two points in this paper which has been circulated that I should like to put to you. In the editorial comments on your lecture in the last page it is summed up thus:—"Dr. Routh" has pointed out that one of the most serious causes

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"of intra-uterine death is syphilis." That is your opinion, I understand?—Yes.

9683. Then it goes on to say:—"Our ignorance as to its potency in this direction is paralleled by our lack of knowledge of the general prevalence of this disease in this country." Do you agree to that?—Certainly.

9684. Then the hope is expressed that "the Royal Commission which is at present engaged in the study of venereal diseases in general will not forget the vast importance of this particular branch of the subject, and the nation has recently sanctioned the expenditure of much time and money on the investigation of the tuberculosis problem and the treatment of the tuberculous person. Is it too much to ask that an organised national service should be instituted to investigate this grievous problem of ante-natal mortality." If I understand this lecture of yours aright, you have a heading on page 9, "Compulsory Registration of Still-births," and you advocate registration of still-births for two reasons; one is that we could get valuable statistics and more knowledge of causation of ante-natal deaths, and disease. That is, I suppose, part of the organisation that you advocate?—Yes; it would also bring material in the field to be examined scientifically, so that we could find out these causes.

9685. Then the machinery which you suggest is, first of all, the utilisation of the Notification of Births Act, 1897?—Yes.

9686. I want to get the state of the law at present. At present you say it may be adopted by any local authority, and its provisions then become compulsory in that urban or rural area. Then you say: "The provisions of the Act include notification to the medical officer of health (not to the registrar of births and deaths), of the birth of any child after the expiration of the 28th week of pregnancy within 36 hours after birth, whether alive or dead, and is to be made by the father or the attendant." Therefore we have to some extent already the principle of notification of still-births recognised?—Yes.

9687. In what respects do you consider that inadequate? Would you put it at an earlier period than the 28th week of pregnancy?—I should like it made compulsory everywhere, to begin with, and then, in addition to that, I would like notification of earlier miscarriages made to the medical officer of health.

9688. Should the doctor notify a miscarriage compulsorily?—If a doctor or midwife was in attendance there would be no difficulty in notifying it.

9689. Suppose with miscarriages no doctor or midwife is in attendance?—In some cases, and then I suppose it would not be notified.

9690. You draw a distinction between miscarriage and still-birth?—Yes, a still-birth is after the 28th week.

9691. Do you think you could really go back with the compulsory notification to an earlier period; could you possibly make it compulsory to notify?—I have suggested if a fœtus is formed it should be notified, and the specimen, if possible, preserved.

9692. That implies the presence of some person more or less skilled?—Yes, probably.

9693. Then would your law be that whenever assistance of that kind has been called in to the woman, the doctor or the midwife, as the case might

be, would be under a legal duty to notify to the medical officer of health?—Yes, I would lay that down. I know it is almost impracticable for the present, but I hope we shall come to that later on.

9694. At all events, you would have this Act made a general law throughout the country?—Yes.

9695. That would apply to still-births, and still-births only?—Yes.

9696. That, if it were followed up, I suppose, would be a considerable step in the right direction; I mean, if there really was an effective registration of still-births. I do not know how far it is effective now?—Yes, especially if the still-births were available for examination.

9697. Then is the point this, that you want to change the law, and you want this compulsory notification carried to an earlier stage than the 28th week?—Yes, I would like it to be if possible.

9698. How does it work at present? I have not referred to the Act. Who is the person who is to notify at present?—Do you mean in the Midwives Act?

9699. Take first of all the Notification of Births Act?—I believe anybody might—the father, or, in the absence of the father, the attendant.

9700. Then really in the Notification of Births Act, as in the Notification of Diseases Act, in practice the duty of notifying is really imposed on the doctor who is cognisant of the case, or on the attendant of the wife in the case of a still-birth. In the case of a still-birth the midwife has the duty to notify?—Yes, she has, as soon as possible.

9701. That is under the Midwives Act and the rules made under the Midwives Act?—Yes.

9702. Then how would you have this notification dealt with when you have got the information to the medical officer of health? Would you have any general system of registration? Supposing you wanted to find out whether a particular married woman had had a child born, would that be recorded?—The still-births in these compulsory areas would be registered with the general medical officer of health.

9703. Of the district?—Yes.

9704. Then in order to carry out your object of getting a list or accessible registration of these cases, you would have to have some more central system or office, or something of that kind, would you not?—Yes. I should like a compulsory registration of still-births with the registrar for the purposes of statistics; but I want notification to the medical officer of health for the purpose of supervision of the women afterwards, and examination of the material.

9705. So that there might be a record which anybody who treated the woman afterwards might consult to see what her history had been?—Yes. I do not know whether in her subsequent illness the doctor would be entitled to get at any of the facts. The medical officer of health would no doubt use his discretion in any such circumstance.

9706. Still the facts would be recorded somewhere where they could be got at?—Yes.

9707. Then you attach great importance to having accurate and reliable information as to the actual prevalence of these ante-natal deaths?—Yes.

9708. I suppose that is not practicable at present?—No, we have not the facts.

(*Sir Kenelm Digby.*) Thank you very much.

The witness withdrew.

TWENTY-FIFTH DAY.

Friday, 13th March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. J. S. RISIEN RUSSELL called and examined.

9709. (*Chairman*.) You come here, do you not, to represent the views of the Royal College of Physicians?—Yes, from the College of Physicians to express my own views.

9710. What hospital are you now connected with?—The University College Hospital and the National Hospital for the Paralysed and Paralytic, in Queen Square.

9711. You say you are not able to give us any definite statistics, but you wish to state your experience in your evidence. You have come to the conclusion that without syphilis neither general paralysis nor locomotor ataxy would exist?—That is so.

9712. And you have come across a very large number of cases of those two derived diseases?—I have.

9713. In most of those cases you say a definite history of syphilis can be obtained. Do you mean the patient will give you enough to indicate it?—Yes, he will give a direct history of syphilis.

9714. Then you say that in all cases of the kind in which the patient has not supplied this family information, the Wassermann test has proved positive, either in the blood, the cerebro-spinal fluid, or both?—That is so.

9715. That has really practically covered all the cases of these two diseases that have come under your observation?—Since the Wassermann test has been in operation.

9716. In order to make certain in the case of a patient in whom you have no clinical or other evidence of family history, do you think both the blood serum and the cerebro-spinal fluid should be independently tested?—I think that very important.

9717. You would not trust to the evidence of one alone?—I would not.

9718. Then if one alone gave a positive reaction you would be quite satisfied?—I should be quite satisfied then.

9719. But a negative reaction in the one would lead you to demand a test in the other?—Certainly.

9720. Now we come to the reliability of the Wassermann test. You say it is to be trusted only when in the hands of a recognised expert, and that one negative result should not be relied upon as conclusive. Will you say what you mean by a recognised expert?—What I mean to say is, that if it is sent to a laboratory, we should know who the director of the laboratory is, what his experience is, and also have some guarantee that he is supervising the work, and that it is not left too much in the hands of assistants, who perhaps have not had sufficient experience. The reason I say that is, because from time to time I have had cases where the Wassermann test has been said to be negative. I have then submitted the person to some other observer on whom I could rely, and I have found the test has been positive. Therefore I always like to know who has applied the test, or who has supervised the investigation.

9721. Then in your view it really depends on the efficiency of the head of the laboratory?—It does.

9722. And in all cases where there was an efficient head, you would be prepared to trust the results brought out by the Wassermann test?—Yes.

9723. Can you suggest any way of guaranteeing the validity of the test? Suppose, for example, this Commission were to recommend that a considerable number of State-aided laboratories should be set up to make this test, can you suggest any way in which the result obtained in such laboratories could be absolutely guaranteed, so that you could trust them in all cases?—I think the only way would be to have someone actually in the laboratory who is responsible. I do not think anybody simply supervising, going from laboratory to laboratory, would do.

9724. So that you think a duly qualified medical man should be in direct personal superintendence in the taking of the tests?—Yes.

9725. Do you think that any supervising of the technique is desirable?—I should have thought so.

9726. Do you think it is possible?—That I cannot say; I have not sufficient experience from the laboratory standpoint. I can only say one would imagine it would have been better to have it supervised. I would certainly prefer to know that the original Wassermann test is being applied, rather than some modification of it that we have less experience of. But, of course, there are modifications, I know, in the hands of good men that are quite reliable, and their results apparently agree with those of others who are applying the original test of Wassermann.

9727. But you would be more satisfied if there was one general recognised method?—Undoubtedly.

9728. It is probably the case, but we have not any evidence, that some methods may be more trustworthy than others?—Quite so.

9729. Taking general paralysis, in your experience you have found no form of treatment which results in the arrest of the disease or its cure?—No, I have not.

9730. We may regard it, therefore, as an incurable disease, resulting directly from syphilis?—Undoubtedly.

9731. You say you have not employed the method of admixed salvarsan suggested by Swift and practised by Emery?—No, I have not; I have not sufficient experience of it as yet. I am having it applied, but I have not sufficient experience to say anything definite.

9732. Do you think there is any reason to hope that that is an effective remedy?—Only so far as Emery tells us of his results.

9733. I suppose in the course of a few months you will arrive at an authoritative opinion on the subject?—I shall be much better able to say then.

9734. Taking locomotor ataxy, you think that locomotor ataxy can be very definitely influenced for good?—I do.

9735. Do you say that mercury is the drug to be relied upon? Would you tell us what your treatment by mercury of this disease consists of?—The mer-

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[Continued.]

cury is best administered through the skin, preferably by inunction, rather than by injection, because the inunction is better under control. In the event of the patient being given too much, it can be got out of the skin readily, whereas if too much has been given in an injection, it of course cannot be extracted. The result is, it is better to employ the method adopted at Aix la Chapelle, of rubbing it in, than by injection. Where however, it is convenient for certain reasons not to have the inunction, it is better to fall back on injection, and to place no reliance on mercury by the mouth in these nervous affections. I can never satisfy myself that I have seen the same good, or even any good practically, with that method of administration, compared with the inunction treatment or the injection treatment.

9736. And you have not yet been able to satisfy yourself that salvarsan given by the intravenous method produces satisfactory results?—As far as locomotor ataxy is concerned, the only thing I can be quite sure of is, that in a fair proportion of cases it gives great relief to the lightning pains, which are very distressing. It may light them into activity at first, then afterwards they have a long period of remission from their pains; but as regards the progress of the disease otherwise, I have not been able to satisfy myself that salvarsan has done anything in supplementing mercury, although it is my routine custom now to give salvarsan in conjunction with mercury.

9737. Have you formed any opinion as to other diseases closely connected with a syphilitic taint?—Of the nervous system?

9738. No; I am coming to those later. I was thinking of aneurism more at the present time and the like diseases?—Yes; I do not care to give any evidence on that; because it does not come so much under my direct observation even in a hospital like University College. I would get a case perhaps once in five or six years. In private practice it is a mere accident that I come in contact with it, so I would prefer, if I might, to limit myself to nervous diseases, of which I have had a large experience.

9739. In your private practice do you come across many cases of syphilis now?—A great many cases of syphilis affecting the nervous system.

9740. Not many direct syphilitics?—They do not come to me.

9741. Have you had any experience yourself of the effects of salvarsan on syphilis pure and simple?—No, I have not.

9742. Have you formed any general opinion as to the increasing or decreasing prevalence of venereal diseases as a whole?—It is very difficult for me to speak on that point, because these things do not come under my observation in their earlier stages. I get only the after effects, as far as the nervous system is concerned; and that has been increasing. In my earlier practice in hospital I was brought much more into contact with general diseases and syphilitic affections in general, and so possibly my belief that syphilis is not as prevalent as it was may depend rather on my being limited in my experience now. Therefore I would rather not give a direct answer to that question.

9743. Have you had any experience in the treatment of gonorrhœa?—No, I have had none.

9744. Is University College Hospital a large one?—It is one of the medium sized hospitals of London.

9745. It takes cases of all kinds?—Yes, of all kinds.

9746. Does it make special provision for treating cases of venereal disease?—There is no special department for that.

9747. As regards wards, does it make any special arrangement?—No; it has no special wards for that.

9748. Is it capable of carrying out the Wassermann test?—Yes. We have two skilled pathologists, who are quite reliable.

9749. Does it in such cases give salvarsan regularly?—Yes; at any rate in all my cases I do.

9750. As regards the hospital for nervous diseases, how many patients does that contain normally?—I

think it has 190 beds at the hospital, and some more beds at Finchley at the convalescent home.

9751. Does it cover nervous diseases of very varied types?—All forms of disease, not only drawn from this country, but from all parts of the world I might almost say, people come to the hospital. Owing to medical men visiting it from all parts of the world, they send patients there.

9752. Then your experience in connection with that hospital must have given you a great amount of knowledge in connection with these nervous diseases?—Yes, very large.

9753. Have you come to the conclusion that in those nervous diseases syphilis is very frequently present?—That is my opinion.

9754. Can you give us any idea of the percentage of cases in a hospital of that kind which could be directly traced to syphilis?—No; but that could easily be obtained from the hospital statistics. I could not give you any definite real information. I think all I could say on that point is this: that when a nervous affection comes under one's observation, the first thing one tries to determine is whether it is organic or only functional. If it is organic, then syphilis is the first thing one thinks of before one allows oneself any liberties in any other direction. I mean, excluding the possibility of syphilis, then one enters into the possibilities of other causes.

9755. Then in all cases of nervous disease such as come before you in the hospital, would you always have a Wassermann test taken as a matter of routine?—In the hospital?

9756. Yes?—Not as a matter of routine.

9757. But in any case where there was the slightest suspicion?—Yes, the slightest suspicion.

9758. In some of those cases, I suppose you do obtain a partial family history?—Undoubtedly.

9759. And where that history is of a syphilitic character, you would not wish to have a test made; but in all other cases, if you were not certain of the family history, you would have the test applied at once?—Yes.

9760. In that hospital, do you come across many cases of nervous disease derived from acquired syphilis?—Yes.

9761. What form does acquired syphilis show itself in in the way of nervous diseases?—It may show itself in the form of a gumma, which may affect either the brain or the spinal cord; or again, it may show itself in a thickening of the coverings of the brain or the spinal cord, due again to a syphilitic condition.

9762. Acquired?—Acquired—what we speak of as a meningitis, chronic forms of meningitis. Then, in addition to that, a very common form indeed is its affecting the blood vessels of the brain or spinal cord, causing inflammation which results in clotting of the blood in the blood vessels, which results in cases of the brain in what is commonly known as a stroke of paralysis, or in the spinal cord, a paraplegia, paralysis of the lower limbs, as opposed to hemiplegia, one side of the body being paralysed when the brain is affected.

9763. Is what is called a stroke of paralysis very frequently due to acquired syphilis?—Very frequently. Indeed, I teach the students that if a young man or woman presents himself or herself with a stroke of paralysis, not having been acquired during the course of some other illness, and a person has no heart disease to account for a clot having been dislodged from the heart or brain, that person has no legitimate right to have hemiplegia, the stroke, unless he or she has had syphilis; and it is an almost invariable rule, that that will be found correct. You cannot apply that to older people, that is to say, people of advancing ages. Their blood vessels may have undergone changes without syphilis. But people who are in the middle period of life, and younger people who have acquired paralysis in that way, it will be found almost invariably the case that syphilis is responsible.

9764. Then up to what age would you regard a stroke as giving rise to a considerable suspicion of

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syphilis?—Up to the age of 50 or 60. After 60 years of age, one would find it increasingly unlikely.

9765. Could you give us any idea of the relative number of cases in that hospital that arise from acquired and congenital syphilis?—I cannot speak statistically at all.

9766. Have you any general impression as to which is the more serious as judged by the records of that hospital?—At that hospital we see very few children. We have no special ward for them, and therefore acquired syphilis undoubtedly is the more prevalent.

9767. But you come across also a good many cases of congenital syphilis?—Yes.

9768. What form of mental disease does that mostly lead to in your experience?—Some form of idiocy, some form of what is known as a spastic paralysis, a diplegia, a condition in which the limbs are affected on both sides, causing disability. In other cases in which there is a stroke of paralysis down one side; then cases in which the disease known as general paralysis which we get in adults, and which may occur as the result of congenital syphilis in children or young people. Locomotor ataxia in them is not nearly so common as is this form of general paralysis.

9769. Then these congenital cases that come before you in that hospital, I suppose, do not come before you, as you say, very young. What is the youngest age at which they come to that hospital?—We do have them in the hospital, just a few cases in children; but they are so few that it is hardly fair to judge from a hospital of that kind. We have children of three or four years of age, but most of them come in for some acute condition like infantile paralysis. We do not encourage idiots and patients of that kind. They come more to the out-patients' department; we do not get them in the wards of the hospital so much.

9770. In cases of nervous diseases which are plainly due to syphilitic infection, is the treatment generally successful?—It depends very largely on how soon the treatment is commenced, the particular variety of affection obtaining, and thirdly, the age of the individual affected. If I might begin the other way about; the older a man's nervous tissues, the less well does he respond to treatment. His recuperative powers are much smaller than those of younger individuals. Then as regards the variety of the disease, you will gather from what we have just been saying about locomotor ataxia and general paralysis, they are much less amenable to treatment than the earlier manifestations of syphilis. Gumma, gummatous meningitis, syphilitic myelitis, syphilitic hemiplegia—all these earlier manifestations are much more amenable to treatment than are the later conditions like locomotor ataxia and general paralysis.

9771. As regards the acquired cases, you are of the opinion that the earliest possible treatment is essential if you can get it, and it is much more likely to be effective than if left to a later stage?—Undoubtedly.

9772. As regards the congenital cases, is it the same with them, that they ought to be taken as early as possible?—Undoubtedly.

9773. Is it your general impression that nervous diseases taken as a whole, are very largely due to this disease?—Yes.

9774. Very largely?—Very largely.

9775. You could not, from your experience in that hospital, give us an idea of the percentage of disease cases which may be strictly attributed to syphilis, could you?—No, I could not.

9776. But do you think the hospital could give us those figures?—I think so; I think there would be no difficulty in that.

9777. And they would be useful figures for us to obtain?—Quite.

9778. Have you any suggestions to make as to the importance of the treatment of these special diseases in such hospitals as those you are connected with?—I almost blush to have to say that even in these hospitals the treatment is not efficiently carried out. I mean to say, I do not think that any hospital, or any place where the treatment is supposed to be in vogue, the patient ought to be allowed to rub in the mercury himself.

9779. Then in neither of these hospitals that you know, do you think the facilities are as great as they ought to be?—They are not as great as they ought to be.

9780. You would urge this Commission to recommend that all hospitals of that kind should be rendered in some way fully capable both of diagnosis and of carrying out any treatment which may be thought advisable?—Undoubtedly.

9781. You attach great importance to that point?—I do.

9782. Do you think that in that way any real impression can be made upon the prevalence of the disease?—I do.

9783. Do you think that the retention of patients or the compulsory bringing of them back to complete treatment is desirable or possible?—Desirable. I do not know about possible, but highly desirable.

9784. Do you think in cases where people have been undergoing free treatment at the expense of the country, they should not be allowed to escape while they were infectious among the general population?—I do.

9785. In your hospitals do people go out who are still in an infectious state?—You see, in our hospitals we do not get them so much in that condition. We get the later manifestations, when they are not infective.

9786. You do not get them at the most dangerous state of the disease?—No, we do not.

9787. Have you given any thought to the question of notification in either of its aspects?—No, I have not.

9788. Do you think that the Registrar-General's returns could be improved by more specific designation of diseases connected with venereal disease?—I do.

9789. Do you think that there would be any difficulty in arranging that the return should be made confidentially to the Registrar-General's Department without hurting the feelings of the family?—You mean from the hospitals?

9790. I am not thinking of hospitals, but of private certificates of death. Do you think that is possible?—That would raise a good deal of difficulty, I am afraid.

9791. Then, taking notification from the other point of view, as a private practitioner, would you like to be compelled by law to notify to the health authority every case which you had diagnosed as syphilis or gonorrhœa?—I should not like to have to do it.

9792. Do you think it is not advisable it should be done, or do you think it would upset the whole of medical etiquette and jurisprudence?—Of course if it became law we could not help ourselves.

9793. Do you think it would have the effect of making patients avoid all doctors who conscientiously obeyed the law, and seeking more assistance than ever from quacks?—I am afraid so.

9794. Have you any experience or impression as to the number of patients who now visit quacks among your patients? Do you think many of them have been to quacks?—A large number, in the well-to-do classes more especially; and even in the poorer classes it is extraordinary what people will do in the way of spending all their money on some quack or other, with some hopeless disease possibly, in which nothing can really be done that is curative.

9795. And you think that the evil of quackery is really a very serious one?—A very serious one.

9796. Do you think the law ought to be stiffened up more to enable us to deal with quacks who are making money?—I do.

9797. As regards syphilitic disease especially, I suppose early treatment by a quack really makes proper treatment more difficult?—Much more; it is losing valuable time.

9798. Not only losing valuable time, but it does actual harm to the patient?—Yes.

9799. Do you think we must take quackery as a very serious business, especially in connection with venereal disease?—I do.

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9800. And that any steps possible to reduce its amount, such as frightening people from going to them, would be desirable?—I do.

9801. (*Sir Kenelm Digby.*) Following that up a little, you have come across, have not you, a great many cases where the patients have resorted to quacks?—I have.

9802. I mean, you go so far as to say it is on a very large scale?—Undoubtedly.

9803. And a scale that requires careful consideration as to whether some stringent measures—more stringent, at all events, than at present—might be taken with a view of stopping the practice of resorting to quacks?—Quite.

9804. Would you make it penal not only on the quack and unqualified person to give advice or treatment, but also persons who resort to quacks?—It is difficult to answer that question. I should say there is no doubt about the quack who administers; but as to the person who goes to him I cannot say.

9805. If you could do it, it would probably be the more effective of the two?—It would be more effective.

9806. Does it seem to you that there is stronger justification for some stringent measures to stop quackery in the case of venereal diseases than in the case almost of any other disease?—Yes, I do.

9807. I daresay you know it is a very difficult thing to do. It has been attempted very often and not been successful?—Quite.

9808. And also, what is a parallel case, but I do not know if you have come across it much, the evils of quack advertisements?—Quite so.

9809. That, again, is perhaps a matter of still greater difficulty, because it embraces questions of the Press and so on?—Quite so.

9810. In your experience have quack advertisements been at all a prevalent evil?—Undoubtedly; drawing people of course naturally to the quacks.

9811. Therefore, if any effective measures could be taken to stop quack practice and quack advertising, you would think that was a very great advantage?—I should.

9812. With regard to another question which the Chairman asked you about, the importance of hospital treatment, have you any suggestion at all as to how that could be done? Do you merely think the standard should be raised by better knowledge, and so on, or could any measures be taken of a legislative character to effect an improvement?—One of the great difficulties in this country is that most people object to rubbing in the mercury with the uncovered hand. You can get that done abroad, and you can get it done by a very few English rubbers. As a rule they object to do it. They will either have a glove-covered hand, or they use a glass roller to rub in the mercury, but neither of those methods is nearly so effective as when the uncovered hand is used. Of course, they object to using an uncovered hand because they absorb mercury into their own system.

9813. My question was rather directed to this. That is a question for one of my medical colleagues. Do you see any way by which the State could secure a more effective and better treatment of these diseases in hospitals than exists at present? I will give you an instance of what I mean. Supposing, for instance, there was a State grant to the hospitals on condition that they improved their treatment of venereal diseases?—That each hospital should have one or more specially skilled rubbers for the administration of the mercury.

9814. That would be one point; but I suppose there are a good many other points still?—Yes.

9815. There you have the beginning of bringing the State rather into connection with the hospital in a case of that sort?—Yes.

9816. Should you approve of any State control or assistance to hospitals?—I think it is very difficult to bring in State control unless you bring it in universally; I mean in general, rather than confine it to particular cases. Personally I am not in favour of that. Comparing our hospitals with the hospitals abroad, I must

say our hospitals are infinitely better, and the patients are much more comfortable.

9817. But this is just the point in which our hospital system does rather fail?—That is perfectly true.

9818. You spoke just now of there being provision at the University College Hospital for venereal diseases. Are they encouraged to come there, or, at all events, is any drawback placed in their way?—No, not at all.

9819. Are they treated like any other patient?—They are treated as any other patient.

9820. But there are no special wards?—No, no special wards.

9821. Then they are placed with other patients?—Yes.

9822. I do not know whether you have given it any consideration at all—if you say you have not I will not trouble you—to any possibility of any measure that might be taken to prevent or to hinder the marriage of syphilitic persons, or say diseased persons?—I think that is a very important matter. Only quite recently I had experience of how, if it were possible for every one to make a clean breast of it, and the disease to be accepted without the reserve which is at present observed in connection with it, grave danger might be prevented. The case is that of a young man who acquired the infection, and went to one medical man who told him it was not syphilis, and then he went to another one, who was doubtful. To be on the safe side he was put under mercury, and after being under mercury treatment for some time he had a Wassermann test applied. This proved to be negative, and on that he was allowed to become engaged to be married. Afterwards he was tested again, and found to give a very strong positive reaction; but, nevertheless, he is to be allowed to marry after a short energetic course of treatment, whereas he has no right to be married.

9823. Do you think it would be possible to have some method of securing that a properly qualified medical man might give a certificate of reasonable safety for marriage?—Yes, I think so.

9824. You think that would be possible?—I do.

9825. I do not say it is possible or practicable, but supposing there was a law that a person who had once contracted syphilis or gonorrhœa should not marry unless and until he got a certificate of reasonable safety from a properly qualified medical man?—I think that would be reasonable.

9826. Do you think that you might have sufficient guarantees that a certificate of that kind should not be improperly given?—I do.

9827. Could that be done by disciplinary rules made by the authorities of the medical profession, do you think?—I think so.

9828. And enforced?—And enforced. I think in the majority of instances that have come under my own observation people have been only too anxious not to marry until they are safe.

9829. But we are dealing with everybody. We are dealing not only with the higher classes, but artisans, the lower classes, and everybody. If this evil is to be stopped really efficiently, we must go down through all classes of society?—Exactly.

9830. What I want to know is this; supposing it was enforced by law that a man who had once had a disease of this kind should not marry unless and until he could be certified to be reasonably safe, you would approve of that?—Yes, I should.

9831. There are all sorts of difficulties, of course, connected with a law of that sort?—Quite.

9832. (*Sir Malcolm Morris.*) You have had a large private practice as well as hospital experience, have not you, for a great number of years?—I have.

9833. Is there any difference in the character of nervous diseases produced by syphilis in the upper classes as compared with the working classes?—I should not have said any. It is just as prevalent in the one as the other, and of just the same character.

9834. Is it more prevalent in the upper classes, do you think?—No. I should not have said so. I should have said as prevalent, at any rate, but not more.

9835. Syphilitic lesions of the brain and spinal cord are not more probable with people who work with their

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brains instead of working with their hands like the working classes?—I think it applies more in connection with the question of country people as opposed to town people. As far as the brain is concerned, the general paralytics are drawn more from the towns than the rural districts. Locomotor ataxia, on the other hand, one finds from all parts, and I have not found any difference really between people who have been working with their brains in towns as opposed to people who have been working like ordinary labourers.

9836. You think it would be the same sort of percentage?—Very closely.

9837. Is there any difference in the way in which the disease begins. I mean, are nervous diseases more likely in cases in which there has been comparatively slight primary and secondary lesions, or at all events secondary lesions?—Yes; that certainly has been one's experience; that in a great many of the cases the primary lesion has been very slight, and has been made light of, and the treatment has been ineffective, or the thing has not been recognised as syphilis at all.

9838. Do you think that in a large proportion of the cases you see of nervous disease, there has been practically no treatment in the early stages?—Yes, or very inefficient treatment.

9839. It is not because of the character of the disease; it is rather due to the absence of treatment, is it?—I think so; but one cannot say that because a patient has been effectively treated, of necessity that patient is free from risk of these latent manifestations.

9840. Therefore, do you always make an effort to find out how much treatment there has been in the past in those cases?—Yes, always; and in the majority of instances one finds it has been ineffective.

9841. Do you believe that in the earlier stages of the diseases the prolonged courses of mercury make any difference so far as the future is concerned?—Do you mean in these diseases themselves?

9842. Yes?—Yes, undoubtedly, with the exception of general paralysis, and in that I think nothing does.

9843. Do you mind saying why you prefer inunction as a remedy, rather than subcutaneous injections?—Simply because inunction is under better control; that is to say, if you have given too much mercury, and get dysenteric diarrhoea and the other manifestations of mercury poisoning, by thoroughly washing it out of the skin you get rid of any further absorption of mercury into the system. If, however, those symptoms arise after you have injected the mercury, you have no means of getting out what is under the skin; it has to remain there and it is further absorbed.

9844. Do you know it is the routine treatment in the Army to give it by subcutaneous injections?—Yes, I do.

9845. Do you think that is unwise?—I think it is not as satisfactory as the other.

9846. The reason seems to be the difficulty of carrying out the rubbing treatment to a large extent?—That is so.

9847. Which applies to the Army as much as it does to the hospitals. Do you think it would be possible to be able to get a sufficient number of people to apply mercury by inunction in the various hospitals of the country?—I think if it were encouraged. If they were adequately remunerated, I think they would.

9848. Is it not a fact that in most of the hospitals on the Continent they get one patient affected with the disease to rub the other, so that they both get mercury at the same time?—Yes; in some hospitals that is so.

9849. Would it be feasible to carry that out here in the hospitals?—I doubt it. I do not think the treatment is really effectively carried out unless it is under special supervision.

9850. Your point is there ought to be specially trained people who would undertake this?—That is my point.

9851. Have you seen any of these particular cases carried out of treatment by means of one single dose of salvarsan and then by injection of the cerebrospinal fluid afterwards?—I am now having cases

treated in that way, but I have not sufficient experience to say whether it does good or harm.

9852. Is that the same method which has been described by Dr. Emery?—Yes.

9853. Which was originally Swift?—Yes.

9854. Have you ever seen a case of locomotor ataxia in which an injection of salvarsan has done absolute harm?—No, I cannot say that I have, although one has read of it, and one has read of harm in general paralysis also, but I have never seen a case myself.

9855. You have seen it administered in a considerable number of cases?—Yes.

9856. And you have never seen in any single case actual harm?—I have never seen in a single case actual harm.

9857. Do you consider at the present time that medical education has been well carried out in connection with these diseases?—I think so.

9858. Do you think the medical student at the present day is taught all that he should know about syphilis?—It is very difficult for me to speak from the standpoint of the original primary manifestations, and so on, because of course I do not get opportunities of that. I can only say, in so far as the affections of the nervous system are concerned, the later manifestations of syphilis, they are well taught.

9859. You cannot say about the early stages?—I cannot say.

9860. (Mr. Lane.) I understand you object to the modifications of the Wassermann test; you would attach very little value to them?—I cannot say that. I cannot put it quite like that. What I say is, that when having a test of the kind applied, one would like to know that the person who is applying it is an expert in such matters, and that he is perfectly satisfied that as good results are obtained by him by that method as by the original method introduced by Wassermann?

9861. You are familiar with Fleming's method?—Yes.

9862. Would you trust that?—Yes, I trust it. I constantly have Fleming's test applied to my cases.

9863. Have you had any experience of the Noguchi test?—No, I have not.

9864. Or of provocative injections of salvarsan?—Yes, I have had experience of that.

9865. And you have found that the Wassermann often became positive after a small provocative injection?—Yes.

9866. As regards this treatment of Swift's, would you give us a brief explanation of it for the benefit of the lay members of the Commission?—Swift suggested that you should inject salvarsan in the vein, into the blood stream, then draw off blood in an hour's time, and then allow the blood to clot and the serum to exude from the clot. He then takes that serum and mixes it with a saline solution, heats it to a certain temperature, and then injects that into the spinal fluid.

9867. It is a somewhat complicated procedure?—Yes, it is.

9868. And there is difficulty occasionally in introducing it into the spinal dura mater?—That difficulty depends a little bit on the person who is doing it. There ought to be no real difficulty in getting into the neural canal and injecting into it, but it is not always easy to get fluid from the spinal canal. The fluid is sometimes at too low a pressure so that it does not flow, but there ought to be no difficulty in getting in and introducing fluid.

9869. Then you are in favour of inunctions in preference to injections; but do you find that the absorption of inunctions is certain? There are some skins into which you may rub mercury for a considerable time without it having the slightest effect on the patient?—I cannot say that has been my experience when it has been properly done, with baths opening the pores of the skin, and then the rubbing thoroughly effected by the bare hand.

9870. You would not say that it was an appropriate treatment as a State measure?—No; I can quite see the difficulties—that the injection treatment is much more easy.

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9871. You say that mercury by the mouth exerts little, if any, influence over syphilis; but until the last comparatively few years the routine treatment was by pills?—Yes. I think, if you look at my précis, you will see that I am only speaking in so far as the late manifestations of syphilis are concerned—I am not referring to the early manifestations of syphilis, but, if I may add, even there the old-fashioned pill method of administering mercury is not to be compared with the newer method—I cannot help feeling that a great deal of what we are suffering from, in so far as the later manifestations of syphilis are concerned, in people who were supposed to be efficiently treated, is because they were treated by these pills rather than by injection or inunction.

9872. The treatment of mercury by the mouth was prescribed for a period of two years formerly?—Yes.

9873. But that was proved, I think, to be quite insufficient?—Quite.

9874. An authority such as Fournier would recommend five to seven years?—Quite.

9875. Do you think patients could be cured by mercury taken by the mouth?—It is very difficult to say; I suppose some people are.

9876. You must in your experience have met with lots of cases of syphilis which have been treated by mercury by the mouth, and in which the subject had married and had produced perfectly healthy children, and had ultimately died from some quite different form of disease?—That is quite probable.

9877. You would not guarantee that those patients were cured then?—I think they were cured in every probability.

9878. The difficulty is to say when. When you say salvarsan exerts no special influence on the course of the disease you are referring not to the earlier stages?—No, I am referring to only those two affections, general paralysis and locomotor ataxia.

9879. Have you ever seen any nerve lesions following the injection of salvarsan?—I have not myself seen any, but one has read of them. I once saw a patient who had been given abroad five injections of salvarsan within a period of a few weeks, and he had intense double optic neuritis, inflammation at the back of the eyes, a condition which might have been due to a syphilitic tumour of his brain, or might have been due of course to the salvarsan, according to the accounts we have of what salvarsan can do. In that particular instance, I think it was the salvarsan, for the reason that without any further treatment of salvarsan and giving him mercurial treatment the whole thing entirely subsided.

9880. You have had cases of that sort described in which optic neuritis occurred after one injection of salvarsan, but in which it subsequently cleared up after further injections. In that case the salvarsan was not productive of optic neuritis?—In this particular instance he had no more salvarsan.

9881. Have you seen any cases of auditory nerve lesions following salvarsan?—No, I have not.

9882. You have read of them, have you not?—I have.

9883. Then, in your experience, there is some diminution in the amount of nerve syphilis that you meet with nowadays in comparison with formerly?—No. That was not quite what I meant to imply in replying to the Chairman. What I meant was, it was difficult for me to judge as to whether syphilis in general is becoming less or more prevalent; because I was brought more generally in contact with syphilis in the earlier days of my experience in hospitals. As one has got older, and one's private practice has grown, it has been more and more exclusively composed of nervous diseases. Even in the general hospitals my opinion is wanted on nervous diseases, so that I do not come in contact with general syphilis in the way that I used to in my early days, so that my impression of syphilis perhaps becoming less prevalent may be erroneous.

9884. You were asked as to quack advertisements, and whether it was not advisable to suppress them. You have also come across medical columns in lay papers, I believe?—Yes.

9885. Do you think they are equally obnoxious?—I think they are.

9886. You are aware that in weekly papers they have columns in which prescriptions are given in full for any disease that the individual may enquire about?—Certainly. I have just recently been a victim of something of the kind myself.

(*Mr. Lane.*) We both have.

9887. (*Mrs. Creighton.*) With regard to the objection that you speak of as felt by rubbers to rubbing in mercury by the hand, is there a real foundation for their objection?—I think there is; that unless they are scrupulously careful, they do absorb mercury into their own systems and are liable to suffer from mercurial poisoning.

9888. Is it possible for them to avoid serious consequences?—Apparently, because the rubbers at Aix, who rub year after year, and do it thoroughly, escape in the most extraordinary way.

9889. As you will gather, I am a lay member of this Commission. We hear a great deal about general paralysis, and about general paralysis of the insane. Are they different or the same?—The same disease.

9890. Exactly?—Exactly the same.

9891. Then I should like to ask you how you define a quack?—I am afraid I must not try to do it.

9892. Because, I suppose, in your special branch of medicine, you must come across a great many people who go to healers of different sorts; Christian Science healers, Faith healers, and so on?—Quite.

9893. And you would consider whatever they may call themselves, or their friends may call them, the results of their treatment of these maladies are as disastrous as that of any herbalists?—I should like to qualify that in this way. In nervous diseases we have what are organic and what are functional, and in many of the functional disorders these people can do a great deal of good, not harm. In the organic maladies, on the other hand, they do harm, because they are keeping the patient from proper treatment.

9894. That would apply to maladies that are the result of syphilis?—Undoubtedly.

9895. So that the resort to people of that sort does prevent the possibility of complete cure from syphilitic infections?—Undoubtedly.

9896. And you would be inclined to consider that an added danger in these days?—Certainly.

9897. (*Mrs. Scharlieb.*) Would it be in consonance with your experience and desires that expectant mothers should be supervised; and, would you pass a law for registering abortions and stillbirths?—Certainly.

9898. And for sending the products of conception to a laboratory?—Certainly.

9899. Is it your belief and experience that a large proportion of abortions, stillbirths and deaths during the first weeks of life are due to syphilis?—Undoubtedly.

9900. And do you think that great good would come to the nation if such a law was passed and it became necessary for a woman to be supervised?—I do.

9901. Then with regard to the public, of course, nothing can be done unless we carry the public with us. Unless public opinion is at the back, legislation and regulations are no good?—Quite.

9902. I do not mean regulation of prostitution; but regulation as applied to disease?—Quite.

9903. Is it your opinion that, as a rule (not taking hospitals to which you are attached specially), students get both sufficient didactic instruction, and also that students have sufficient opportunities of seeing syphilitic patients, and seeing the means of diagnosis, and watching the treatment?—No, I do not think that. Having no special lock wards, I think in that our London hospitals are wanting.

9904. And would you advocate special hospitals, or would you have wards in the present general hospitals?—I should have thought that wards in the present general hospitals would have met the case better than allowing the students to go to the venereal diseases hospitals.

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9905. It would not only be inconvenient to students, but do you not think the patients would be more likely to come?—Much more likely to come.

9906. And it is quite possible to prevent infection?—I think so.

9907. Passing from the students of to-day, who are in comparatively a good position, what would you advise with regard to the men and the women who qualified 15 or 20 years ago? How are they to be reached and taught?—Of course there are so many post-graduate courses now, and they are only too glad to avail themselves of them.

9908. But do those post-graduate courses give any instruction in those diseases?—No.

9909. And should it not be attempted?—That is what I mean. It should be added to the post-graduate course.

9910. You would take care that in all post-graduate courses special stress was laid on that?—Yes.

9911. And you would endeavour to give these men and women an opportunity of seeing Wassermann reactions, and seeing the proper treatment of syphilis?—Yes.

9912. And you would, of course, recommend salvarsan for the earlier stages?—Undoubtedly.

9913. And then mercurial inunction carrying on?—Quite.

9914. Then with regard to hospital committees, are they not in as bad need of instruction as anyone?—I think so.

9915. Cannot something be done to awaken them to a sense of their duty?—It is always a great difficulty. As you know, lay people do not like interference from the medical side.

9916. No, they do not?—When we suggest anything, it generally means it is resented.

9917. Would not the suggestion of the subscribers be the strongest suggestion?—Yes.

9918. That they would not help a hospital that did not do its duty?—That would be the best.

9919. Then the next thing is to consider the education of the public?—Yes.

9920. How do you propose the public should be informed that they should know these things which are so vital to them?—I take it it would only be by special lectures, and things of that kind.

9921. Ought not practitioners who are much trusted by their patients, as far as they can, to talk to them, not *à propos* of their own ailments, but about the prevalence of these diseases, and of the necessity of separating between the notion of disease and the notion of moral wrong?—Yes, I quite agree.

9922. Is that not one of the great stumbling blocks?—It is, undoubtedly.

9923. So that you would try to teach men and women who come to you that, after all, all disease must be cured, whether it is measles or these diseases?—Yes.

9924. Would you not also warn adolescents, and especially adolescent boys, against the troubles that they are probably laying up for themselves?—Yes. I invariably advise fathers that that should be done.

9925. (*Dr. Mott.*) Have you seen a paper in the "Journal of Mental Science," by Dr. Kate Fraser and Dr. H. F. Watson? They say: "The chief conclusions drawn by these writers from their joint observations as a whole are (1) that syphilis is the causative factor in a very considerable percentage of cases of mental deficiency of whatever degree of severity, as it is present in over 50 per cent.; and (2) that syphilis is also the main causative factor in the production of that type of epilepsy which manifests itself at early ages." I should like to know what your comments are on that?—I should be quite in accord with those views.

9926. You would?—I should. I should not be able to speak with as much definiteness as to epilepsy as with regard to mental deficiency.

9927. Then you do not think that is an exaggeration at all, from your personal experience?—I do not really, from my personal experience, as far as regards mental deficiency cases. But I should possibly modify it a good deal with regard to epilepsy.

9928. Still, you have seen a great number of cases of epilepsy?—Undoubtedly.

9929. A great many questions have been asked you that I might have asked you, and I will not repeat those. But there is one question which has not been asked you. From your experience have you not found a considerable number of cases of blindness arise from syphilis?—Undoubtedly.

9930. Due to optic atrophy?—Yes.

9931. Either from meningitis in the earlier manifestations of brain syphilis, or in the late manifestations of tabic disease?—Undoubtedly; both classes of case.

9932. Then there was one other question with regard to the incidence of tabes and general paralysis which has not been put, and which I should like your opinion on; that is, the incidence in the two sexes in different grades of society. I should think, in my experience, there are very few cases of general paralysis and tabes in the upper classes?—Very few.

9933. But you see plenty of them in the lower classes; and the lower you go the more numerous they are?—You are talking of women, are you not?

9934. Yes, I mean in women?—Yes.

9935. Whereas with males it is pretty much the same right away through?—Yes, that is quite correct.

9936. Would you draw any conclusions from that with regard to the incidence of syphilis amongst the two sexes in the different classes of population?—I take it the real reason is that the upper classes are more careful from the point of view of the possibility of infection than in the lower classes; further, you have to bring in prostitution; and it is prostitution that is really the root of the evil.

9937. But still, do you not think there are more women infected in the lower classes, because they know less about the disease?—That is what I meant: the upper classes are more careful.

9938. They are more careful about marriage?—Yes.

9939. (*Sir Malcolm Morris.*) Has alcohol any bearing on that particular point?—I take it there are a great many people who become infected because they are intoxicated.

9940. I do not mean that?—I mean the amount of alcohol?—I do not think so.

9941. (*Dr. Mott.*) Then do you think in the light of our present knowledge the term "parasymphylis" should be maintained as regards tabes and general paralysis?—I should not have thought so.

9942. Do you think "parenchymatous syphilis" is better?—Much better.

9943. Then, with regard to inherited syphilis, do you think a far larger number of cases of brain syphilis and parenchymatous syphilis would arise if it were not that so many cases die in early life?—I do.

9944. Have you had any experience of the causes of death of children specially from congenital syphilis?—No, I have not.

9945. They have not come under your notice?—No.

9946. But you know of course they die of meningitis and hydro-cephalus, and very often it is put down as convulsions?—Quite so.

9947. Then with regard to the influence of treatment in relation to these late manifestations of syphilis, general paralysis and tabes, do you not think that you often get a history of a man having been treated for several years with mercury, and yet he develops these diseases? It is quite possible he was not treated with mercury until the roseolar rash appeared?—Quite.

9948. Then he might have been treated for two or three years, but the organism had become generalised in his system?—Yes.

9949. And the nervous system had become affected by that, and the specific organism had been latent, and developed later?—Quite.

9950. That would agree with your views?—Absolutely.

9951. Then from that point of view it seems very probable that if syphilis could be treated when the primary sore is first diagnosed, these late manifestations might be prevented?—I think they might.

9952. Because the generalisation of the organism in the system would not then take place?—Quite so.

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9953. Do you think it is probable that a considerable number of cases of infection of the nervous system occur when the rash comes out, and the symptoms are so mild that they are unobserved?—Yes.

9954. And you would regard it as a proof of that that lumbar puncture often shows a lymphocytosis?—Quite.

9955. You regard that as of very great importance in the prevention of these serious nervous diseases, do you not? I mean the importance of treatment as early as possible?—Certainly.

9956. Then with regard to marriage and the Wassermann reaction, the case that you cited rather showed that the Wassermann reaction is not altogether a reliable guide as to the possibility of marriage. I think you said the patient showed a negative Wassermann reaction?—I wanted to make clear that it was a fallacy. The Wassermann was not taken when it ought to have been taken. They took it after they had treated him with mercury. They invalidated the test, and then they relied on that Wassermann test.

9957. But supposing the man were treated with an injection of salvarsan when the primary sore appeared, and injections of mercury or mercurial inunction, and then another salvarsan, and he did not show a Wassermann reaction; do you think it would be safe to allow such a man to marry?—I should not allow a man of that kind to marry until the Wassermann reaction taken at intervals, was negative for two years. I mean without further treatment.

9958. Then you would not say he was cured even though his Wassermann reaction had disappeared?—No.

9959. Unless he waited two years?—Two years and still a negative Wassermann, without any further treatment.

9960. You must know there are a large number of people walking about with a positive Wassermann reaction, having a healthy family?—Yes.

9961. Would not you be guided by the time after infection as well as by the Wassermann reaction?—Undoubtedly.

9962. Supposing a man had given a Wassermann reaction we will say three years after infection, and you treated him and it disappeared, would you then permit him to marry?—Yes.

9963. You would give him a certificate of reasonable safety?—Reasonable safety. You could not say he was absolutely safe; but reasonably safe.

9964. Then with regard to the treatment of general paralysis by injection of salvarsanized serum by lumbar puncture, you say you have not heard of any cases being cured by that method?—No.

9965. You know that Dr. George Robertson of Morningside Asylum has practised it for two years?—No, I did not know that.

9966. He has, and he has not got any really satisfactory results; he does not claim any at any rate. Could you give any reason why that might not be effective when injected by lumbar puncture?—Because it may not have reached into the substance of the brain where the spirochaetes are.

9967. Then you think possibly that by trephining and injecting it direct on to the convexity of the brain it would be more hopeful?—Yes, more hopeful.

9968. Then with regard to using injections in nervous diseases, I suppose you have thought sometimes that it is not advisable for the same reason I have, that you are liable to get sores with trophic disturbance?—Yes, with trophic disturbance.

9969. (Canon Horsley.) Among the children there is a very painful disease which looks like paralysis, called St. Vitus' Dance. Is that at all ever due to syphilis?—Not in my experience; but there is a form which may simulate St. Vitus' Dance which may be the outcome of syphilis; that is to say, it belongs to the category Dr. Mott referred to, where congenital syphilis affects the brain. Instead of having just ordinary paralysis alone, you may have jactitation which looks like St. Vitus' Dance. Many of those cases are syphilitic in origin.

9970. We find children in our Elementary schools who are frequently absent owing to something of that sort?—Yes.

9971. In that case it is rather desirable to have Wassermann tests to see whether it is real St. Vitus' Dance or the simulated one?—Yes. But there ought to be no difficulty in those cases in distinguishing which are the real ones without the Wassermann test.

9972. With regard to the medical certificate which you say a man before he got married might be called upon to get, it should be given by some authorised practitioner? Was that the phrase you used?—Yes.

9973. It would be rather difficult to get all those certificates of equal value, would it not?—Very difficult.

9974. For example, in the cases you gave where one doctor got a negative test and said: "You can marry," and another a positive, and said: "You cannot marry"?—Yes. I wanted to bring that out as indicating the need for care with regard to what interpretation is put upon each case. One of the tests was valueless because it was done at a time when you would not have expected it to be positive.

9975. Still, that man would have gone away and have shown his prospective father-in-law the certificate?—Which he did practically.

9976. I have had some experience in regard to prosecutions for adulterated goods. For example, when there is much salicylic acid in lime juice or excess of boracic acid in cream, we prosecute and get a doctor and an analyst to say it is injurious to health, and then the defendant comes up with another doctor to prove that it is nothing of the sort. Would not that difficulty occur with regard to these certificates too?—I suppose there would be always difficulty in that connection.

9977. That is the difficulty—that certificates can be obtained to prove most things?—Quite.

9978. I mean, it is not so absolutely certain that every doctor could or would so successfully analyse and so honestly state it as to make the certificate of conclusive value?—He could if he would.

9979. I know, but perhaps he would not?—I see.

9980. The case of these eminent analysts coming up one against the other, is exactly the sort of case; one swearing that so much salicylic acid will do no harm to anybody and the other that it is poisonous; that is the difficulty we have in public life?—Quite.

9981. (Rev. J. Scott Lidgett.)—Are you aware that the London County Council, as the education authority, has arrangements with a number of hospitals for treating the diseases of children?—Yes.

9982. And that they have in connection with that arrangement a system of grants or payments for work of that character?—Quite so.

9983. Do you know that that arrangement is so made as not in any way to infringe the autonomy of the hospitals?—Quite so.

9984. That all that is required by the London County Council is a guarantee that the work for which it is paying is actually carried out?—Quite so.

9985. Would not it then be possible upon the same lines for the Government to set up arrangements with the hospitals for the treatment of these diseases, and make grants to them without any further interference with their autonomy than to get guarantees that the work for which the money was given should be carried out?—Yes, that sounds feasible.

9986. So that we might take it that this administrative arrangement between the London County Council and the hospitals might form a precedent for a further arrangement on the part of the Government?—Quite.

9987. As to the question which Mrs. Creighton raised just now about the definition of "quack"; for the sake of the lay people present, might we say that a quack is either an unauthorised practitioner or one who, in carrying on his practice, violates professional medical etiquette?—No, I think it requires more than that. I think it is a person who is carrying on practice without knowledge of the diseases he is treating. That seems to me to be the real harm. I will give you an instance. A patient was suffering from this disease we are speaking of now, general paralysis of the insane; all the tests had been applied, and there

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was no question about the diagnosis, which had been confirmed by several authorities. The patient was taken to one of these quacks, so-called, and he said that the whole of his condition was due to the dislocation of one of the vertebrae of his spine, and that all that was necessary was that he should go into a home and have it put right. He put it right, treated him in the home, but did not cure him of his general paralysis.

9988. Would not that very wide definition almost cover the case of any mistaken diagnosis by any authorised and qualified practitioner?—Would you mind repeating that?

9989. I say, would not so wide a definition of quackery almost cover any case of mistaken diagnosis?—My point is that it is not a question of mistaken diagnosis; it is absolute ignorance on the part of the individual. He does not know the disease, or he wilfully misinterprets what he sees.

9990. But are not all members of the profession relatively ignorant? Is not the basis this, that after all, medicine is largely at present an empirical science?—Yes; but although an empirical science, there are certain diseases we can be quite sure of; we know the nature of the diseases and what will do good and what will not do good. Many of these men who are what we call quacks, are unqualified persons who have never had any training in acquiring the knowledge to enable them to say whether it is this disease or that disease.

9991. But I take it that these men, if they were qualified and if they did not in any way outrage medical etiquette, could hardly be struck at by legislation, could they?—No, not if they were properly qualified.

9992. (*Sir John Collie.*) When speaking of the method of diagnosing cases of apoplexy by the process of exclusion, you mentioned that, in the absence of acute disease, or heart disease, the probabilities were in favour of syphilis?—Yes, in people at a certain time of life.

9993. I am sure it was just a slip; but I think you would like to add chronic nephritis, would not you?—Certainly; but, of course, chronic nephritis would be more likely to give rise to hemorrhage than thrombosis.

9994. Yes, but you would get your paralysis, would not you?—Yes.

9995. With regard to death certificates, do you see any difficulty in a medical man sending to the local registrar a simple notification of the fact of death without details, and a fuller and more accurate account of the cause of death to the Registrar-General at headquarters?—Do you mean whether that would raise any difficulty with the family?

9996. Do you see any difficulty in that being carried out, supposing it was the law?—No, I do not see any difficulty at all.

9997. With regard to the case of optic neuritis you spoke of, would I be right in saying that, in view of the immense number of operations for the injection of neo-salvarsan, practically we consider it quite a safe procedure?—Quite a safe procedure. I might say I mentioned specially that that patient had had five injections within a very short period of time. It was quite wrong treatment.

9998. I wanted to bring that point out. Then there was another point on which I think we might have misunderstood you, so I should like you to make it quite clear. You said that in certain stages of these diseases you did not believe in treatment by mercury; at least, you thought that other methods of treatment were more useful. You do not, I take it, wish to give us the impression that you do not think mercury in the primary stages of syphilis is a very useful drug?—All I wished to convey by that was, mercury given by the mouth in the later manifestations of syphilis. But mercury, by the mouth or by any other method, should certainly be given in the earlier stages.

9999. Would you agree with several witnesses who have told us that 100 per cent. of cases of tabes and G.P.I. are produced by syphilis?—I should say that without syphilis neither of those diseases would exist.

10,000. Then with regard to the question of mercury. From the point of view of the State treatment of these diseases, for the poor chiefly, and in very large numbers, do not you think, in view of the difficulty of getting patients to attend regularly for treatment by inunction and of the expense of ensuring that that treatment be properly done for them, and in view also of the wonderful success of the army and navy methods, treatment by inunction must be confined more or less to the wealthy?—I quite agree.

10,001. And lastly, I take it that you are aware that with the Aix-la-Chapelle treatment people are cured even in London?—Undoubtedly. I should just like to add that a good deal of my evidence may be misinterpreted in this way; that I was told by the President of the College that I would only be wanted in regard to these parasymphilitic affections, so called, and in drawing up my synopsis I based it simply on those. That is why it must appear rather curious in connection with some of the earlier manifestations of syphilis.

10,002. That is really why I asked you that question?—Quite so.

10,003. (*Mrs. Burgwin.*) I think you said you considered that syphilis is the cause of a good deal of mental deficiency amongst children?—Yes, that is my opinion.

10,004. Do you know whether it affects boys and girls equally?—I think so.

10,005. Do not you think more boys are affected?—I should not have thought so.

10,006. Then this is somewhat of a puzzle to me. It is very likely I get one or two in a family, the first and second child quite normal, but the third, we will say, is abnormal?—Quite.

10,007. That child is followed again by quite normal children. Would you think that would be attributable to syphilis?—That could quite well be attributable to syphilis.

10,008. That third child?—That third child.

10,009. And if you cured the disease, would you improve the brain?—In the child?

10,010. Yes?—It depends upon how advanced the condition is in the child and how soon the treatment was commenced. But even treatment commenced early would be sure to leave some deficiency in that brain.

10,011. You do not think the abnormal brain is ever made normal?—No, I do not.

10,012. Not by any treatment?—You mean the congenitally abnormal brain?

10,013. Yes?—No, never

10,014. Could you tell us whether the number of mentally deficient children is increasing?—I should say, yes.

10,015. And you would attribute that to syphilis?—Very largely.

10,016. Would you think, then, that the education authority should have the power to take a blood test of such children as those attending a special school?—I think such a test would be desirable if carried out by a competent person.

10,017. A quite competent person?—Yes.

10,018. Could we hope for a great improvement if such tests were applied, and then treatment to follow?—I think there would be a considerable improvement, but it would never make those children normal.

10,019. (*Dr. Arthur Newsholme.*) I gather that you think the present arrangements for the treatment of syphilis are not sufficient for the needs of this country?—That is so.

10,020. You would recommend, I believe, subsidies to hospitals to increase their facilities for treatment?—I would.

10,021. Those subsidies to be made by the State or by the local authorities?—Quite so.

10,022. And you would extend those subsidies to laboratories which would aid the diagnosis of these diseases?—Undoubtedly.

10,023. With regard to both those things, you think the State must step in and help in the treatment and prevention of these diseases?—I do.

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10,024. Then with regard to the subject you were just now asked about, the relation of mental defect to syphilis, I have here the table to which Dr. Mott referred—the results obtained by Dr. Kate Fraser and Dr. Watson—showing that in cases of mentally defective children 51 per cent. gave a positive Wassermann?—Quite.

10,025. Those, I gather, were children in Glasgow. In Glasgow also a sample was taken from the general hospital population, not the mentally defective population?—That is so.

10,026. Three hundred and thirty-one consecutive cases were taken of people coming to the hospital for all sorts of diseases?—Yes.

10,027. Of those 331, it is stated in this paper by Dr. Carl Browning, 22 per cent. gave a positive Wassermann?—Quite so.

10,028. So that a random sample of the hospital population gave 22 per cent. positive Wassermann reactions, and these mentally defective children about 51 per cent.?—Quite.

10,029. I wanted to ask your view as to the bearing of that on the causative influence of syphilis in relation to the mental defects?—It shows the prevalence of syphilis in the community.

10,030. And does not it also make one suspect that when syphilis is so common as 22 per cent. in a general hospital population, it may be that among the 51 per cent. of the mentally defective who showed a positive Wassermann, a very large proportion of them had nothing at all to do with syphilis? Have I stated that clearly?—No; I am afraid I do not follow.

10,031. Taking the Glasgow sick population as a whole, 22 per cent. had a positive Wassermann?—Which meant that those 22 people per cent. had been infected by syphilis at some time or other.

10,032. Presumably. Then taking the mentally defective, 51 per cent. had a positive Wassermann. If you take the remaining 49 per cent. of the mentally defective, undoubtedly we may say they were not due to syphilis?—No.

10,033. Therefore there are causes of mental defect apart from syphilis?—Surely.

10,034. Is it not possible, or even likely, that those causes of mental defect are operating on the 51 per cent.?—I see what you mean; that they may be responsible rather than syphilis.

10,035. I want to bring out that possibility; I am not saying it is so?—Of course, it would be very difficult to disprove that except from post mortem observations. The post mortem observations would determine whether the syphilitic lesions existed or no.

10,036. The Commission have to take these observations as statistical statements, and I am asking for your judgment, as a pathologist and a physician, as to how far we can say, in the 51 per cent. of defective-minded children who had a positive Wassermann, that their defective-mindedness was due to syphilis?—I should have said that undoubtedly that was so—that those 51 cases owed their mental defects to syphilis.

10,037. Notwithstanding the fact that in the sample of the general hospital population of children, 22 per cent. also showed a positive Wassermann without mental defect. I do not see any necessary conflict, but it suggests the possibility that other causes than syphilis might have been operating among those 51 per cent.?—It is quite conceivable that other causes might have been operating. But I would put it like this; that the chief cause, under these circumstances, would undoubtedly have been syphilis, and if post mortems had been carried out on the brains of those children you would have found syphilitic lesions. As regards what you say about the general population, of course, you would not expect mental deficiency in all cases of cases. The figures were taken from the general community, I take it, at all sorts of ages, not specially in children.

10,038. No; these are 331 children coming to the hospitals?—I thought you said the community at large.

10,039. No; they were sick children coming to the Children's Hospital and the Central Dispensary of Glasgow?—Of course syphilis may exist in an indi-

dual without causing mental defect. For instance, we do not know why, but two men have syphilis, and one develops general paralysis of the insane, and the other develops locomotor ataxy. I was only going to say, two children may be syphilitically affected, and one develops mental deficiency and the other escapes.

(Dr. Mott.) Two of the same family, even.

10,040. (Dr. Arthur Newsholme.) We will go a step further. Imagine that among the feeble-minded, instead of being 51 per cent. it had been 22 per cent. who showed a positive Wassermann, what then would you have said?—If among the feeble-minded what happened?

10,041. If among the feeble-minded children who were examined 22 per cent. instead of 51 per cent. had shown a positive Wassermann?—I should have said that those statistics showed a smaller amount of syphilitic affection than one is accustomed to meet with.

10,042. You will remember at the same time the random sample of sick children in Glasgow who were not feeble-minded also showed 22 per cent.?—Yes.

10,043. I am trying to bring out that that would almost necessarily influence your mind as to that 22 per cent. having been due to syphilis?—I am afraid I really do not follow what you are putting.

10,044. Supposing I am engaged in a statistical investigation into the origin of feeble-mindedness among the Glasgow children, and I take a random sample of children in the schools and find 22 per cent. with a positive Wassermann, although they are healthy-minded children. I then go to the Feeble-Minded Asylum and I find there also exactly the same percentage, 22 per cent., with a positive Wassermann. Can I draw any inference at all in that instance as to the influence of syphilis on feeble-mindedness?—I quite see your point now. You could not draw the same inference and you would have to have other proof.

10,045. Quite. Then the magnitude of the difference between the 22 per cent. and the 51 per cent. is the measure of the probability of syphilis having been connected with it?—Certainly. I should like, if I might, just to add this. In many of these cases of deficiency in children they bear other marks of congenital syphilis on their persons, apart from the Wassermann reaction.

10,046. Quite so. The question of the prevention of marriage was mentioned several times. Can you tell us how it would be possible to prevent the marriage of infected persons, apart from notification. If there is no notification, I take it it would be impossible to make any regulations effective?—Quite.

10,047. So that any regulation or law with regard to the prohibition of marriage within a given time, necessarily implies a notification of the disease to the responsible authority?—Yes, I take it so.

10,048. With regard to the faith-healing question, if you made any prohibition of quackery it would have to be somewhat general, would it not?—It would.

10,049. Take the case of the faith healer. The faith healer may be very useful in functional disease?—Quite.

10,050. But may do a lot of mischief in the diseases which we are dealing with, the organic ones?—Certainly.

10,051. But you could not possibly arrange that only cases of functional disorder should be sent to the faith healer?—No. As a matter of fact there are qualified persons who undertake the treatment of such cases by properly recognised methods, of so-called suggestion, hypnotism and so forth. They are properly qualified persons who are able to diagnose conditions themselves, or accept patients sent to them by properly qualified medical practitioners who have made the diagnosis. Therein lies the difference between them and the quacks, so-called.

10,052. So that you would be prepared to advocate legislation for altogether preventing treatment by non-medical persons who are faith healers?—Undoubtedly.

10,053. Do you think that is in any way practicable?—That I cannot say. I should certainly aim at that, because the public would not be deprived of the possibilities of the treatment. The public would still

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[Continued.]

have it legitimately as opposed to their going to people who indiscriminately treat them by the method, irrespective of whether that method can do them good or no.

10,054. (*Chairman.*) I gather that you are prepared to accept those figures that were given by Dr. Fraser and Dr. Watson, and that they coincide with your own experience?—Yes.

10,055. You are not surprised at the large percentage they show?—Not in the least.

10,056. Did you see some figures, given, I think, by the same doctors, of an examination of 2,061 cases of mental defects by four separate observations, which were given in the "Berliner Klinische Wochenschrift" for 1911, in which only 1·5 per cent. of the cases gave positive reactions?—No, I have not seen those.

10,057. You would not go so far as to say that no positive conclusions as to the relations of mental defect to syphilis can be drawn from any accounts hitherto published, would you?—No.

10,058. You would not accept that?—No.

10,059. In fact, the statements which have been published so far coincide with your own personal experience?—Certainly.

10,060. Have you come across cases where the same blood has been examined by three different experts in hæmatology where the respective results have been positive, negative and doubtful?—I would not like to say off-hand. I have come across cases where two people have differed; I cannot say about three.

10,061. And where that difference occurs, you say it may be due to want of skill or want of care in nearly all cases?—I do.

10,062. With equal care and by the same method the same results should be produced in every case?—I think so.

10,063. As regards the method itself, do you agree with this statement: "The limit of reacting power which differentiates a positive serum from a negative one must be arbitrary, and requires to be fixed by

experiment for any given combination of 'antigen' and serum"?—I would rather not express an opinion upon that point, because I have not sufficient laboratory experience.

10,064. Is it your experience generally that men who are infected or who think they have been infected do show some anxiety as to the possible results on their marriage?—Undoubtedly, that is to say, in the better classes.

10,065. You are speaking of the better classes and you think it is common with them?—Yes, I should say it was the rule.

10,066. Do you think with regard to the other classes, that if there was more widespread general knowledge of the effects produced, there would be greater reluctance to undertake marriage before treatment?—I think so, if they were properly educated as to the results.

10,067. Do you think it should be an obligation to give to every patient who goes to a private doctor or an institution a printed form setting forth the risks attendant upon himself and his possible wife?—Yes, I think it would be a very good thing.

10,068. You would make that obligatory?—Yes.

10,069. Do I understand you to say that the Royal College of Physicians do not think that any further additions to the curriculum of medical training are desirable or necessary?—I cannot say that. I merely come here not as representing the College or to express any opinion for the College, but to give my own experience as a Fellow of the College.

10,070. Then from your own experience you think that the medical student at the present moment is getting as much knowledge as is necessary of these diseases?—I think I said I was not in a position to judge of his knowledge of the earlier manifestations of syphilis; but, as far as the later ones are concerned, I am certain that he is.

10,071. You do not know that it is so?—No.

(*Chairman.*) Thank you.

The witness withdrew.

TWENTY-SIXTH DAY.

Monday, 16th March, 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.S.C.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

MR. E. R. FORBER (*Secretary*).

Dr. DOUGLAS WHITE called and examined.

10,072. (*Chairman.*) You have made a special study of the question of the prevalence of venereal diseases, have you not?—Yes, I have done my best to try to estimate that.

10,073. You have also followed the movements in combating these diseases in foreign countries to some extent?—That is so.

10,074. You tell us there is a wide difference between the estimates and statistics. That is absolutely true, and, I suppose, you understand the extreme difficulty that we have in coming to any reliable estimate of the prevalence of these diseases among the

civil population?—Most certainly, and such estimates as I have here submitted I do with considerable diffidence; but at the same time I think it extremely important that one should acquire, if not an accurate idea, at least some sort of idea of the prevalence of the diseases.

10,075. Then these calculations that you give us are an attempt to generalise upon such data as statistics give?—That is so.

10,076. With the full admission that they must necessarily be faulty in many respects?—That is so.

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Dr. D. WHITE.

[Continued.]

10,077. As far as we are concerned, we hope to get fairly good results of a statistical character from hospitals and institutions dealing with the invalid population. But when it comes to spreading those over the civil population, as you will agree with us, the difficulty is very great?—Yes; it is very great, because you have to rely upon the individual physicians.

10,078. You, of course, are well aware of the flaws in the Registrar-General's figures?—Yes.

10,079. And that a great many deaths which should be attributed to syphilis are not attributed to syphilis, and if it was not that general paralysis and tabes are not known generally to the public as being so connected, we should not have those figures?—Yes, the Registrar-General's figures must necessarily be extremely defective. At the same time I think that they have a quite definite value of a relative character; that is to say, supposing we wished to find what proportion the female deaths bore to the male deaths, I think we should find ourselves accurately guided by those figures. Again, if we want to find what proportion of children and adults die, I think we are likely to get the true proportion, although the absolute figures would be hopelessly out.

10,080. So that you regard these figures as, at all events, valuable for relative purposes?—Yes, certainly; and very nearly for absolute purposes as regards diseases, which have not, up to the present, been viewed by the public as indications of syphilis. There is no reason why there should be any inaccuracy beyond a few omissions, of course, in cases of aneurism, general paralysis or tabes.

10,081. Then you attach greater importance to the accuracy of the deaths from those three diseases than to the deaths which are returned under syphilis?—Very much more.

10,082. And you regard the Registrar-General's figures as also valuable as showing the relative incidence in different areas and aggregates of people?—By the same reasoning, I think you are bound to do so.

10,083. Do you think they are also valuable as indications of the relative prevalence in different classes of the community?—Do you refer to his figures to which I refer, as to the infantile deaths in various classifications?

10,084. Yes?—If that is so, I do not think I would attach as great importance to those figures, because it is a distant sort of argument. You are finding out how many children of various classes die of syphilis. You are only finding out a proportion of the truth in that case, and then you are arguing from the children who die to the adults who acquire syphilis, and it seems to me rather a far cry.

10,085. Then, as regards the incidence of deaths from syphilis and from the three cognate diseases among the different classes, do you think those relative figures are trustworthy?—I am afraid I do not know. Do such figures exist apart from the infantile deaths?

10,086. We have had figures given us by the Registrar-General since, which were prepared specially for us. You have not seen those, probably, as they did not appear in the public returns?—No, I have not seen those. If, however, such figures bear out the other figures, I should attach more importance to them.

10,087. One possible flaw in your arguments which we will proceed with next, is that the returns, as far as we understand, from institutions are generally much more accurate than those of people who are treated in private houses. Therefore, institutional treatment would tend to show a greater prevalence in towns than in the country. That, of course, has occurred to you?—Yes, that is to say, that people would be registered as dying from these diseases at the towns where they die instead of the places where they had lived?

10,088. Yes?—I understand at Somerset House in the returns for 1911 that system has been, as far as possible, given up, and they are now allocating the people who die in institutions to the places where they have lived. But that process did not begin until 1911, and the 1911 returns are the last that are out in England and Wales.

10,089. So that this new classification would not be of any value for our purposes?—No: but at the same

time, I think the comparison of the 1911 return with the previous returns would serve to indicate whether it is going to make very much difference or not. The difference, in fact, is great; previous to 1911 the majority of Londoners dying, *e.g.*, of G.P.I., died outside the London area.

10,090. Now your first series of conclusions is based on the Prussian census. How was that census taken?

—That census was taken on the 30th April, 1900, and, as far as I understand it, all the doctors in Prussia were asked to return all the cases which were under treatment by them at that particular date for any kind of venereal disease. One would naturally expect that you would not get all the doctors replying to such a request as that. In the whole of Prussia, however, two-thirds of the doctors very approximately—it was nearly 64 per cent.—replied and gave their cases. But in Berlin a smaller proportion replied, only 52 per cent. The figures are contained in this return, which I have with me.

10,091. Do you think that the returns as made indicate proportionally the returns that were not made. Is it safe to assume that?—No, I think it would be dangerous to assume that; but it is very difficult to know what other assumption to suggest.

10,092. I suppose we may take it that the returns as actually made by the proportion of the doctors who made them of the cases of these diseases under their treatment on this particular day, were accurate?—I should think they would be very highly trustworthy.

10,093. But at that very day there would be a considerable number of patients who were attending the ministrations of quacks who would be missed?—A very large number.

10,094. And that would make a larger number of cases than apparently existed in the figures you have there?—Yes. You will notice that Dr. Blaschko appears to be of opinion that the official figures ought to be multiplied by two at least; and you will also notice that, following the doubt I do feel as to the certainty and correctness of such a method, I have limited myself to half of that amount.

10,095. Then your deduction from the Prussian census of 1900 suggests that the curve of population incidence might be parabolic or possibly logarithmic in character?—Yes, I would present this as the merest sort of suggestion, in order to indicate to the Commission my view as to how the incidence increases as the population goes up. It is a very general statement. I do not mean it for an accurate or particular statement.

10,096. Taking as the first unit, you say, a 300 population, a village of this size would show a clean sheet, a town of 3,000 would show a certain casualty figure, say x per cent., 30,000 would show $2x$ per cent., 300,000 would give $3x$ per cent., and 3,000,000 $4x$ per cent. You take those co-efficients 2, 3, and 4, and come to the figures you have on the basis of the Prussian returns?—No, I cannot say that I do that. This is by way rather of illustration.

10,097. That is only an illustration?—It is only by way of illustration.

10,098. There would be some fixed co-efficient to the variable x , which would indicate the ratio as the population increased. That is your idea?—That is the suggestion.

10,099. Then that figure x , the variable, would vary for different countries or even for the same country at different times. That is quite clear. It is also clear that the difference between towns of different sizes would tend to disappear as intercommunication became more frequent and the population moved about more?—Yes, I think that is so.

10,100. But, still, you arrive at the general conclusion that the larger the city the greater the proportion of sexual disease, and I suppose that is fortified by a good many figures?—Yes. Would it help in the elucidation of it if I were to mention some of the figures here?

10,101. I think it would be useful?—In Berlin the actual number of cases under treatment was 11,598.

10,102. Those were returned by 52 per cent. of doctors?—That is so.

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[Continued.]

10,103. And the actual figures in Berlin would be considerably larger?—Undoubtedly. Berlin has a population of rather over 2,000,000. I had better go by the percentages. In Berlin, taking the adult males, there were 142, practically. In 17 States with more than 100,000 inhabitants the percentage went down to 99·87; that is practically 100 per 10,000 instead of 140. In 47 towns with less than 30,000 inhabitants it went down to 58 per cent.; and in the smaller towns and rural districts it went down to 7 per cent.

10,104. Have you plotted those in a curve?—It is impossible to plot them in a curve; at least, I have not attempted to do so, because they have lumped together a considerable number of towns. I could make a curve of it, but I have not done so.

10,105. One other question about this Berlin census. Are the doctors of Prussia generally well acquainted with all the symptoms of the disease, and would they be certain not to have missed a good many cases?—I should not think there is any reason to think that the German doctors are worse in that respect than we are? They are more likely, perhaps, to be better.

10,106. That is what I meant. Do you think that in the past they have been rather better instructed in these diseases than our own doctors?—I am inclined myself to think they have, but I have very little evidence of it.

10,107. Then from your previous argument, you expect to find in England that London would have a larger proportion as it has 4½ millions of inhabitants; whereas no other English town reaches the figure of one million; but on the logarithmic hypothesis that proportion would not be much higher?—It would not be much higher, because on the logarithmic hypothesis it would come out to perhaps a tenth or an eighth higher.

10,108. Then you apply to that the returns of the Registrar-General which, you say, we may trust relatively. You do not find that the incidence in London is so very much higher in proportion to the country?—No; I have distinctly found in actual fact that it is less than I had anticipated.

10,109. Now, you take the country under three heads: the administrative county of London with 4½ millions of population; aggregate county boroughs, with a population in all, except four cases, of over 50,000; other urban districts, some very large and others quite small; and rural districts. Taking the aggregate deaths in those four classes of areas from syphilis (not infantile), locomotor ataxy, G.P.I., and aneurism, you get in the year 1911 respectively 847, 1,637, 1,410, and 713, as applied to populations of 4½ millions, 11 millions, 12¾ millions, and 8 millions?—Yes.

10,110. That gives you a proportion of deaths from those four scheduled diseases in those geographical areas that you define?—Yes; if you treat London as having a unit of incidence. It is less elsewhere. It is ·8 in the county boroughs, ·6 in the urban districts, ·5 or rather less in the rural districts.

10,111. So that it does decrease?—It does decrease.

10,112. London stands at the top of the tree?—Undoubtedly.

10,113. But not so much as might have been expected; that is your point?—Yes, that is my point.

10,114. Then taking the actual figures for the whole of England and Wales, you have 5·45 times the figure for London alone, and the total deaths from these four causes, all due to syphilis, aggregate 4,605 in the year 1911. That gives you a rate of 124·6 per million of inhabitants, distributed over the whole?—Yes, distributed over the whole of England and Wales.

10,115. Now, you take Scotland separately. In Scotland you say the proportion between the large and small towns and rural districts is about the same as in England, nevertheless the proportion of deaths from these causes is considerably greater; being 687 out of a population of 4¾ millions, or 144·3 per million as against England and Wales 124·6. That is a striking difference?—Yes, I consider that is a remarkable fact.

10,116. A very remarkable difference, though the actual proportion of the urban population to purely country population is nearly the same?—It is about the same. That is to say, in Scotland you have the great towns practically taking up about two millions of the population, the smaller towns taking up another million, and the rural districts are practically a million. That is to say, a quarter of the whole approximately is rural in Scotland.

10,117. Taking the distribution between town populations and country populations in Scotland as compared with that of England, how does that stand? Is the higher percentage of Scotland generally made up of the towns or of the rural districts, or of both?—The greater proportion is in the largish towns, two millions about.

10,118. Then the towns in Scotland account to a great extent for the larger general proportion of deaths?—Not as compared with England, because in England the proportion of large and small towns and rural districts is about the same. I think there must be other causes at work.

10,119. That is what I mean. You have a higher general prevalence over the whole population of Scotland, dividing that population into urban and country districts. Either the prevalence of syphilis in both urban and country districts must be greater in Scotland than in England, or there must be a very considerable increase in one of the divisions. It must be so?—It must be so.

10,120. You have not those figures?—No.

10,121. Now, coming to Ireland, will you tell us what you arrive at?—With regard to Ireland, although the population is very nearly the same as that of Scotland, being about 11/12ths, nevertheless you have a very much less incidence of disease; there is half the incidence, as nearly as possible, in Ireland that there is in Scotland. The conditions in Ireland are absolutely reversed to what they are in Scotland. The rural population comes to about three-quarters of the whole population; whereas in Scotland the three-quarters is town population. Consequently, one feels it is quite a thing to be expected that the incidence would be much smaller, seeing that most of the Irish population is a scattered rural population.

10,122. Have you seen the figures of the Registrar-General for Ireland, which show that Dublin is worse in prevalence than London?—I am very sorry, but I have not seen them. I do not think I have, perhaps, spent very long over the figures for Ireland, but I could not on the face of them find the prevalence in different towns.

10,123. We can give you some figures for Ireland. This great difference in Ireland may also partly be due, may it not, to the large emigration of young men at the critical ages when they are most liable to get these diseases?—Yes, because that would alter the age grouping very considerably.

10,124. Probably there are far less young men of what may be called the critical age in proportion to the population in Ireland than in Scotland?—Yes, I think that is true; but that may be also true to some extent in Scotland. Then you have the opposite phenomenon to account for.

10,125. You say: "It may be doubted whether "Dublin or Belfast would show a cleaner sheet than "that of Sheffield or Bristol" (Dublin is much worse than either); "but they are reduced to relative insignificance by the rural preponderance, just as in "Prussia the returns from the greater town areas, "population eight millions, are diluted by the 25 "millions of the rural districts." That must be so. What general conclusion do you get from this? You say that, "the figures of the official returns must "represent with much truth the relative condition in "different parts of the United Kingdom with regard "to syphilis?"—I do not see how we can escape from that.

10,126. You cannot escape from that conclusion?—From that I proceed to use the Registrar-General's returns to calculate in proportion to London what we may expect to find of venereal disease in the whole of the country.

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[Continued.]

10,127. You take London for your purpose as the unit of reckoning?—Yes.

10,128. And you say, "we shall be roughly correct" if we say that in order to obtain the total for the "United Kingdom we must multiply the London figure by 6.6." Why 6.6?—Because 6.6 is the actual figure, reckoning in the other deaths from the causes previously mentioned. Just as it is 5.45 for England and Wales alone, so it is 6.6 for the whole of the United Kingdom.

10,129. Then you also assume that the distribution of venereal diseases follows the same proportion as syphilis?—Yes, that some people might take readily for granted. But it just occurred to me that it might be fallacious, and I looked up the figures in this Prussian return, and found quite distinctly the proportion of gonorrhœa to syphilis appears, very roughly of course, but it does appear to go down as towns increase in size; that is to say, as the town gets smaller there seems to be a tendency to a greater prevalence of syphilis relatively to gonorrhœa.

10,130. That is judging by this Prussian census?—Judging entirely by the Prussian census. I merely call attention to it because it is a possible fallacy.

10,131. We in England have nothing we can produce which is comparable to the Prussian census to enable you to check these figures?—Absolutely nothing that I know of.

10,132. So that you follow the Prussian proportion which, you say, would not be true?—That is so.

10,133. You say, "It is generally believed that gonorrhœa is far more in excess of syphilis in the various countries than their official returns (*e.g.*, "those for the armies) would, on the face of them, suggest." You do not think then that the army returns, which are trustworthy returns as a rule, can be relied upon as giving the indices of the relative proportions of gonorrhœa and syphilis in the civil population?—Well, I think that they are reliable; one would think that they showed reliable proportions; but it seems to me the army returns, so far as I know, only give the numbers of admissions, and in the case of syphilis, a person who has had syphilis has been, up to the present, liable to recurrences of various kinds, and consequently each case may figure perhaps three times on the list. If you judge simply by admissions, you are likely to get a higher preponderance of syphilis than actually there is.

10,134. You say that in the recruiting figures much of the syphilis is either not recently acquired or else is inherited. But in our Army at all events, all the recorded syphilis, or nearly all of it, must be very recently acquired, because the men are under such careful supervision now?—In the Army?

10,135. Yes; there cannot be much syphilis in the Army now which is not quite recently acquired?—No; that is why I have, for my purposes, separated recruiting figures and the Army figures.

10,136. Now will you explain your indirect method of reckoning the absolute figures which you base upon Berlin?—In order not to keep you very long about it, the first step is that there were 142 per 10,000 adult males and 45.37 per 10,000 adult females.

10,137. I want to get these other figures on our minutes, please; the Berlin figures you base them on?—The actual figures?

10,138. Yes, the actual figures on April 30th, 1900?—Out of the then population of two millions there were 11,598 cases of venereal disease under medical treatment; of those, 6,728 were of gonorrhœa, 738 of chancroid, and 4,092 of syphilis. Of all these cases, practically three out of four were men and the remaining one a woman.

10,139. Those cases are cases calculated on the proportion of population from the 53 per cent. of doctors' returns?—They are the actual figures of the returns.

10,140. Then this 3.1 figure also of the proportion of men and women: I do not think that is right?—It is not 3.1. It ought to be "exactly as 3 is to 1."

10,141. I thought so?—It is a stop instead of a colon,

10,142. That is for all Berlin?—That is for all Berlin.

10,143. Now will you go on with your application of those figures?—That represents 142 per 10,000 adult males, 45 per 10,000 adult females, or on the whole, 91 per 10,000 of the adult population. Now, what we are wanting to get at is not the cases, the actual number of diseased people, but those who are recently diseased. That is our point; to find out how many acquire the disease annually. Consequently, according to Dr. Blaschko's reasonable calculation (I think his figures are very reasonable) we only take a third of the whole figures from syphilis, all the chancroid, and about 5/6ths of the amount of gonorrhœa. I frankly do not know quite how he gets the 5/6ths.

10,144. It is not arbitrary, I presume; it is based upon some figures?—I am afraid I have not been able to find out whether that is based on anything at all.

10,145. It is important?—It is important.

10,146. It affects the thing very much?—It does; but I should think only a small proportion of the gonorrhœa cases are old cases.

10,147. You apply those proportions to the total figures, and you get what?—That makes the proportion 5,460 gonorrhœa, 738 chancroid, and 1,364 syphilis. Shall I go on and explain how I arrive at that?

10,148. Yes. You have got now as far as the distribution among these diseases?—These are fresh cases under treatment at that particular time. Now the question is, how often are these figures repeated. Dr. Blaschko takes it as a fact that gonorrhœa will, on the average, be treated for 1½ months, presumably the same for chancroid, and that syphilis will undergo longer treatment, and certainly ought to undergo much longer treatment: and as a fact he thinks it generally undergoes two months or so of treatment. The result of that is, that you will multiply those figures by 8 in cases of chancroid and gonorrhœa which reappear eight times in a year, and for syphilis you would only multiply it by 6. The total result of such a proceeding is to find that there are 8,000 cases of syphilis, and 51,000 cases of gonorrhœa and chancroid. I have given those in round figures, because it is no good distressing you with small figures. That gives us 59,000 altogether. You have to deal now with the fact that only 52 per cent. of doctors made replies, and Dr. Blaschko thinks between them and the quacks you certainly ought to multiply those figures by 2. But I think that does not necessarily follow; it may be a considerable number of the doctors who did not reply had not got cases to report. One might argue that at least the half who did not reply had far fewer cases than those who did reply. One cannot say for certain that that is not true; but I think you are not on the safe side if you multiply your figures by 2. It is highly probably correct, but I do not wish to exaggerate in any way or to give you an exaggerated idea; consequently, I propose only to multiply by 1.5; that is to say, you get half as much again, and that would give us a grand total for the year of 88,000 fresh cases.

10,149. Of fresh infections during the year?—Yes.

10,150. Of course, as you will admit, there are some distinctly weak factors in that calculation?—Yes.

10,151. Do you think they err on the side of excess or on the side of minimising?—I think they err on the side of minimising distinctly.

10,152. That is the relevant point. Now go on with your comparison between Berlin and London, please?—In order to compare Berlin with London, I propose to take the recruiting figures for the two countries.

10,153. There I should say that you would be led into error?—Yes; one cannot pretend that it would be more than an approximation.

10,154. You see the period of service is so very much longer in this country than it is in Prussia, and the men in this country are so very much longer, therefore, under careful supervision than they are in the German Army. That would make a difference, would it not?—But these are recruiting figures.

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[Continued.]

10,155. Only the recruiting figures?—Yes; it is the civil population I am thinking of, not the Army.

10,156. Not the incidence of the Army?—No, it is not the Army incidence. It is entirely the recruiting figures; that is to say, recruits are got in both cases from the civil population at corresponding ages.

10,157. That, again, I should say is not quite accurate, is it? I should think probably the average recruiting age in England is about 18 or something less. In Germany it is fixed at 20 absolutely by law, and therefore, a German has a longer time in which to acquire this disease than an English recruit before he is brought under medical supervision?—I thought that the average recruiting age in England was about 19. You know more than I do about it.

10,158. I should think it is well below 19?—In Germany it is anywhere between 18 and 23; that is to say, they are called upon at 18 or 19, but if they are found to be in an unsuitable condition to serve owing to any cause, they are put off for other years. One has the percentages of the people who have come in at 18, 19, 20, 21 and 22.

10,159. I thought they came in absolutely at the fixed age of 20?—No, they do not.

10,160. Now will you go on with the German figures?—They did not publish these figures till 1907, because they did not want to make them public to the world; but since then they have published the figures from 1903 to 1910, and that gives an average of 7·7 per 1,000 of enlisted men suffering from these ailments. The figures in England for the same years give an average of 5 per mille almost exactly; indeed, I think it is exactly that.

10,161. In Germany, is the recruit rejected when he comes up if he is found to be diseased?—No, he is not rejected on that account; he is hospitalized.

10,162. In England he would be rejected?—In England he is rejected.

10,163. Probably, if he knew he had it, he would not present himself?—That is so. I propose, then, to take this proportion of 65 per cent. of the German figure as a means of comparison between Berlin and London. There is something to be said in favour of that, and there is something to be said against it. The first thing in favour of it is my suggestion, which you show some reason to doubt, that the age grouping for practical purposes corresponds. As against it it might be suggested that our Army is a voluntary army, while the German Army is a compulsory army, and that our Army is recruited from a low grade of the population, which would probably be liable to have a larger amount of venereal disease than if it was recruited from all classes concurrently. I think there is something in that argument; but on the whole I doubt whether there is very much. Although I think you said you had some returns that I have not seen, supposing we did exclude the upper classes, which are slightly less diseased perhaps than the lower ones. I do not think it would make so very much difference, because the higher classes are less in number. Therefore while I think there is something in that point, I do not think it is as much as would appear at first sight.

10,164. But a much larger proportion of recruits in the German Army would be people with more knowledge, and would be likely to have taken more care of themselves or to have been taken care of by their parents before they joined the Army. There would be a larger proportion of that class in the German Army than with us?—Yes. I have my doubts as to whether that again would affect it very much; because in Germany the very worst class for these diseases is the student class there. They are the worst; they come next to the prostitutes.

10,165. The best educated class?—The best educated class are the worst in this respect in Germany. I am only going by some figures I have got hold of with regard to the different classes in Germany.

10,166. Accepting these figures, please go on?—Whatever there may be in those considerations, I think it is more than wiped out by the consideration that recruiting in England is voluntary and in Germany compulsory. Recruits here are rejected if they suffer from venereal disease and they are

perfectly well aware of that fact now. So it is clear that in men so recruited we must find a less proportion of venereal disease than if we took a random sample of the same class; that is to say, it is not a random sample we are getting.

10,167. Largely because a man who knew himself to be infected would not present himself?—That is so.

10,168. So that he would not come in as a rejection?—Quite so. The second point I have made here I do not wish to press, because I do not think it is relevant. The result of this calculation, whether you think there is much in it or whether you think there is not, is to make out that in the administrative county of London, consisting of $4\frac{1}{2}$ millions as against slightly over two millions in Berlin, we thus arrive at an actual number of diseased persons in the year of 122,500.

10,169. Comparable to the Berlin 88,000?—Yes, comparable to the Berlin 88,000.

10,170. Now you have to multiply that?—Now we have to multiply that by 6·6 in order to get the incidence in the whole of the United Kingdom. You would get a grand total for Great Britain of rather over 800,000 fresh cases of venereal disease in the year. My next difficulty is how to apportion these figures between syphilis and other forms. I think in this consideration I am probably on fairly firm ground. The army returns for the two countries suggest quite strongly that the proportion which other diseases bear to syphilis is greater in Germany than it is in England in the ratio of almost exactly three to two. If, then, Dr. Blaschko is right in thinking that other forms bear to syphilis in Germany the ratio of nine to one, they ought in England to have a proportion of six to one.

10,171. Now the flaw there is, is it not, that these figures for the army are figures of admissions to hospital, the same man being recorded several times in the year as an admission? I suppose that is the same with the German figures?—That is the same with the German figures.

10,172. And that is a flaw, is it not? They are not new cases, but they are cases returned several times?—Yes, but it is a question of the ratio that these figures have; it is not a question of the absolute figures for syphilis.

10,173. You only want them for the proportion?—You only want them for the proportion of other venereal diseases to syphilis.

10,174. But there, again, it is vitiated, as you have already pointed out, by the probability there would be a greater number of admissions for syphilis than there would be for gonorrhœa?—Yes; but if you divide the numbers in each case by the average number of admissions for the one case of syphilis, you would get comparable proportions.

10,175. Assuming that in England we have this proportion of six to one, you arrive at 114,000 cases of syphilis annually for Great Britain; 686,000 cases of gonorrhœa and chancreoid; and of the 686,000 we may perhaps suggest, resting on the army returns, that one quarter are chancreoid and the rest gonorrhœa?—Yes; that is the nearest approach we can get to a sound estimate on the indirect method.

10,176. That is an estimate of the total infections in the year in the United Kingdom?—Yes, it is 800,000 divided up into those proportions of six to one.

10,177. Now you can go on to the arguments against it?—Yes. This was suggested to me by a layman, and I have thought over it considerably since. The objection might be that those figures are evidently impossible. Supposing we take 30 years, a generation, as a fair time for reckoning, between the ages of 17 and 47 when most people contract venereal disease if they are going to. There are between those ages living at any given time only some 10,000,000 men and some 11,000,000 women, and our calculation of 800,000 would suggest straightaway that there are 18,000,000 of men who have reached the age of 47 who have contracted one or other of these diseases, whilst there are only 10,000,000 men to contract it; and that sounds a very powerful argument. We have, that is to say, greater figures for disease than we have popu-

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lation at all. But I do not think that necessarily makes the figures absurd at all, because if we divide the population of adult men, say into fifths, and say there is a fifth of them who never contract any of these diseases at all, and one-fifth who contract one disease once, one-fifth who contract one disease twice or two diseases once, one three times and one four times, you have then got 10 cases of venereal disease for five men. It is very easy to see, therefore, that when you are reckoning incidence you are not speaking of people. I simply suggest that at least these figures I have given are not on the face of them absurd on that account. And I would especially say that Dr. Blaschko, who, as you know, is an eminent authority on these subjects, gives it as his view that every man in Berlin who has reached the age of 30 has contracted gonorrhœa on the average twice, and one out of every four or five has had syphilis; and that is before the age of 30, while I am speaking of before the age of 47.

10,178. Do you know what those terrible figures of Dr. Blaschko's are based upon?—Yes, I have a letter from him, as a matter of fact, upon the subject. He simply calculates in a very reasonable way from these Berlin figures, but in them he assumes that he must multiply his figures by two. I do not know if you like me to refer to them.

10,179. Are they long?—It is rather long.

10,180. You had better leave them out then. That seems to be a very heavy incidence of these diseases?—It does.

10,181. One hopes that it is very greatly over-estimated?—I am bound to say if it is true that these Berlin figures should be multiplied by two, I do not think there is any way of getting out of it.

10,182. Then the result of this calculation is that as far as the United Kingdom is concerned, about 28,000 women and 86,000 men contract syphilis annually. Then you go on, "if the expectation of life for a syphilitic (acquired at an average age of 24) be 30 years, which is not unreasonable, there must be in the United Kingdom some three millions of syphilistics, "allowing for a fair proportion of cures"?—I think that if one grants the annual incidence, one is almost bound to grant the other, because I find, on looking up the figures of expectation of life, that the expectation of life at the age of 24 is very nearly 40 years, and one cannot think of syphilis as likely to cut down that expectation of life by at any rate more than 10 years; at least, I should doubt it. Of course, in the unfortunate cases which fall under general paralysis and tabes, the expectation of life would be very much less. On the other hand there would be a very large proportion who would not be very greatly affected. I think 30 is not an unreasonable figure anyhow.

10,183. Then you think the calculation of 3,000,000 of syphilistics is not an excessive calculation?—I am not inclined to think so.

10,184. That is the indirect method. Will you now explain your direct method?—With regard to the direct method, that calculates the number of people who acquire syphilis annually from the number of deaths from the two causes, general paralysis and tabes, which occur at a certain period afterwards. Dr. Mott has suggested in a paper a short time ago that perhaps 3 or 4 per cent. of all cases which contract syphilis die in one or other of these two ways. There is an article in a book here by Fritz Lenz, in which he tries to base a calculation for Berlin upon the figures of Copenhagen; that is to say, in regard to both places one has information as to how many cases of general paralysis exist, and if he knows, as he knows in Copenhagen, or thinks he knows, the numbers of people who get syphilis at particular times, inasmuch as they are all supposed to be notified, he concludes that he will be able to deduce the figures in Berlin of the people who contract syphilis in a given year. His facts are very few. His facts are that in Copenhagen in 10 years, 1881–90, there were 13,500 cases of syphilis notified.

10,185. Those are fresh cases?—Those are fresh cases of syphilis notified. Whilst in the years 1896 to 1905, that is 15 years later, 330 deaths occurred in Copenhagen from general paralysis of the insane. This suggests that rather less than $2\frac{1}{2}$ per cent. of

syphilitics die from this disease alone. But there can be no doubt, as he says here, that the returns for general paralysis of the insane are far more complete than those for syphilis, and consequently I do not think that it is fair to take that $2\frac{1}{2}$ per cent. at its face value, and I do not think it can represent more than 2 per cent. Let us think of that 2 per cent. for the moment. In the United Kingdom there are about 2,600 deaths annually from general paralysis of the insane, and rather over 700 from locomotor ataxy. Thus, if 2 per cent. is a fair figure for the proportion of paralytic deaths, and $2\frac{1}{2}$ per cent. represents tabes and paralysis together, on this reckoning we should arrive at 132,000 syphilitic infections annually. If we take the figure at 3 per cent., which is Dr. Mott's lower figure, that would give us 111,000; and if we took $3\frac{1}{2}$, which is half-way between his upper and his lower figure, that would give us 94,000.

(Chairman.) If Dr. Mott's percentage is accurate, you get very close co-incidence in the 111,000 arrived at by one method, and 114,000 by the other.

(Dr. Mott.) May I say that that is a guess; in fact, I do not think it is at all right. From those published statistics in Vienna I have come to the conclusion that that is a very low figure indeed.

(Chairman.) You think it is a low figure?

(Dr. Mott.) A very low figure. On the statistics of Mattauschek and Pilez, taken on 4,134 cases of officers, it comes out to 7.5 per cent. of people infected with syphilis which suffer from either tabes or general paralysis. But I think those are reliable figures.

(Dr. Newsholme.) The difference is this: that those are suffering. It is not deaths; whereas Dr. White means deaths. Of course, I know these patients eventually die.

(Chairman.) Are your $7\frac{1}{2}$ per cent. figures dealing with deaths?

(Dr. Mott.) I should think the 198 cases of general paralysis are all dead now. They do not live long as a rule.

(Witness.) I had not seen those figures.

10,186. (Dr. Mott.) They are very valuable, I think, in correction of this?—Of course, that would tend to halve them.

10,187. (Chairman.) We cannot rely very much on those percentages, and the probability is the percentage is considerably higher, which will of course reduce the total number?—On the other hand, I would suggest that those Copenhagen figures mean something.

10,188. (Dr. Mott.) I think so?—They are just as much figures, and there are more of them than the case of German officers.

10,189. I only wish to protest against my figure as being accurate. It is a pure guess?—I am sorry, sir, if I gave you the impression. I did not think that you meant your figure as accurate, but I have given the figures of the Copenhagen return.

(Dr. Mott.) Yes, I have heard of them, and I said about 3 or 4 per cent. That is really what made me say it.

10,190. (Chairman.) Now, if we assume 800,000 fresh infections yearly, you say the figures would involve some 450,000 fresh individuals who had previously not been infected?—That is so. I do not mean 800,000 persons, but 800,000 fresh infections, of whom probably about 450,000 are fresh individuals.

10,191. Now I come to your diagrams, in which you classify England and Wales and the United Kingdom in separate figures. Take the figure of aneurism. Aneurism is shown to be increasing. Were those figures corrected for the population?—These are absolute figures here.

10,192. They were not corrected by the increased population from 1882?—No, they are not corrected; these are absolute figures. May I just indicate one or two points in this diagram. You will notice I have said at the beginning—I do not know if it is legible; it was rather difficult to make out this diagram—the increase in population during the 30 years was practically 30 per cent. There follows the 30 years of aneurism. I want to point out two things about that aneurism curve. First of all you will notice that there is a sudden jump about the year 1897. I want to

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point out that that is artificial. That is to say, they adopted a different method of registration at that time, and aneurisms were put down which were not regarded as the causes of deaths, but which were secondary. It was only when regarded as a primary cause of death that it was previously put down, and now cases are put down where aneurism has occurred, and has been found post mortem. Therefore the increase would not be quite so much as it appears to be in the diagram, but still you will see quite clearly there is some increase going on all the time, and that increase is about proportional to the increase of population.

10,193. The Registrar-General's figures show an increase, but not a large one?—They show an increase. You will also notice there is a very small proportion of females as compared with males.

10,194. (*Sir Malcolm Morris.*) These are the Registrar-General's returns, I take it, are not they?—Yes, for England and Wales. Then we pass to the syphilitic returns for 30 years past. In this particular one I have not distinguished between children and adults, and I would direct your attention to the fact that the proportion between males and females is very different; that is to say, they are nearly equal to one another. There is only just such a difference between male and female as may be thought to occur in any disease; that is to say, there is a slightly greater mortality in males than in females at all ages. On the right-hand side you will see 11 years tabulated for the whole, not only of England and Wales, but the whole of England, Wales, Scotland, and Ireland, and they are all added together. In the first, which is from 1900 to 1910, you will see the returns of deaths from syphilis. The adults are put at the bottom, the blue being males and the red being females; the female children are put in red dots, and the male children in blue dots.

10,195. (*Chairman.*) Judging from that, the males and the females seem very much alike?—They are very evenly distributed.

10,196. But the male children seem to be rather above the female children?—I have marked that above, although it is hardly legible; male in proportion to female in the case of children is 1·21; male to female in adults is 1·32. It does not show so much in adults because the diagram is small.

10,197. Then aneurism again shows a large preponderance?—Aneurism again shows a large preponderance of males over females in the proportion of 4 to 1; and you will see that aneurism, there again, shows a tendency to increase. Again in the case of tabes the figures are really much smaller but there is a still higher proportion between males and females; 4·8 times more males than females. We pass now to general paralysis. We see the figures mounting up much higher in general paralysis. You will see the proportion of males to females there is 3·23.

10,198. Those figures as they stand indicate rather stationary syphilis, and progressive increase in aneurism, tabes and G.P.I.?—That on the face of it is the suggestion; but what I cannot understand, and would welcome any explanation of, is why the returns from syphilis show, perfectly steadily, a practically equal distribution among males and females, whilst in these other diseases they are distributed in the proportion practically of four men to one woman, which presumably is about the proportion in which men and women do actually become infected with syphilis. That beats me absolutely; I cannot see any explanation.

(*Dr. Mott.*) Would you mind repeating it.

(*Chairman.*) The ratio of male to female deaths is about 4 to 1 in all except syphilis, where it is only 1·25 to 1, whereas it is about the same in other diseases. That is a very remarkable fact.

10,199. (*Dr. Newsholme.*) Would not the immense preponderance of deaths in the first year of life certified as due to syphilis go very far to account for that?—I have eliminated deaths in the first five years of life. The children are separated off and still your adult males and females remain the same. On the face of it almost, if one did not know anything of the facts, the suggestion would be that the males and females who die of visceral syphilis are hereditary syphilitics,

while the other cases are acquired; but of course I know that is impossible. The facts are all against us.

10,199a. (*Dr. Mott.*) But the proportion of general paralytics and tabes, the death of males and females, is about 4 to 1?—Yes.

10,200. And that is a pretty clear indication, is it not, of the relative incidence of syphilis in the two sexes?—So it would appear to me.

(*Chairman.*) But it does not agree.

10,201. (*Dr. Mott.*) I think that is a definite fact?—I entirely follow you.

10,202. It entirely accords with some observations I have made with regard to the incidence of these diseases in different classes of the population?—It does.

10,203. (*Rev. J. Scott Lidgett.*) Are these taken from the Registrar-General's returns?—Yes.

10,204. Is it a fact, may I ask, that a larger proportion of women's deaths from syphilis being in the cases of unfortunates and so on in institutions are truly registered, and that there is a larger proportion of false registration in the case of males?—A larger proportion of these?

10,205. My point is this; is it a possible explanation that a larger proportion of women's deaths from syphilis are due to the unfortunate class who end their life perhaps in an Institution, and who are therefore truly registered as dying from these diseases, and that more men die outside and are falsely registered?—I should hardly think on the face of it that that would account for the thing; because after all the majority of our registered deaths from syphilis will be institutional deaths, and I should think the men will drop in to die just as much as the women.

(*Mrs. Creighton.*) Surely the prostitute has nowhere else to die, and the man may die in his own home in many cases.

(*Sir Malcolm Morris.*) According to that argument, the women would be expected to be more.

10,206. (*Rev. J. Scott Lidgett.*) Quite, and that is the point. As a matter of fact as regards syphilis they are equal. That is the difficulty, I take it, you feel. You do not feel the difficulty of the latter part, but the difficulty of the first part, deaths from ordinary syphilis?—Yes.

10,207. And the fact that they are not recorded in death certificates and so on does not alter the fact of their coming out equally in both sexes, because they would be the same?—Yes.

(*Rev. J. Scott Lidgett.*) My suggestion was it did alter it, because as a matter of fact the proportion of women is much higher to men than it ought to be, and that is due to the fact that considering how largely women's deaths are recorded from the unfortunate class, their registration is likely to be more accurate than the registration of the men who die from it.

(*Sir Malcolm Morris.*) I do not agree with the Registrar's statement that it should be larger.

(*Mrs. Creighton.*) It is in all the other diseases except syphilis.

10,208. (*Sir Malcolm Morris.*) But these are a very peculiar class to themselves. These are syphilitics recorded as deaths, but the fact of having syphilis does not necessarily mean death. There is a large percentage of recoveries?—Surely if that argument of yours holds, it ought to hold equally well with these other diseases.

10,209. (*Rev. J. Scott Lidgett.*) It is not an argument, but it is a suggestion, and I was wondering if that helped?—Would it not apply equally to the other sequential diseases?

10,210. (*Chairman.*) Returning to your proposal for the education of the families, you say we have to consider two elements: first, the facilities for treatment, and, secondly, the education of the public. You also say you regard the ignorance of the public as the root factor in the spread of venereal diseases. Does that mean that you are clear acquired disease is more prevalent among the more ignorant classes?—I think in this country it is so.

(*Sir Malcolm Morris.*) You used a very strong argument against it just now.

10,211. (*Chairman.*) You gave us the instance that in Germany there is a great prevalence among the

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most highly educated?—I think, sir, if I may, I will draw a distinction which I think I proceed to draw in my statement. I think you will recognise there may be some validity in it. I do not say that the mere knowledge of facts with regard to disease is going to prevent people from self-indulgence. I doubt whether that would be generally true; but I do consider that the greatest element in the spread of disease comes from the ignorance of the man who has contracted disease, because first of all if he knew he would at least go to get it cured, because that is self-interest. On the other hand, he is not deliberately wicked. As a rule he does not want to infect his wife and have syphilitic children; that is to say, that although the individual might not be prevented from self-indulgence, yet there would be a far less amount of spread of the disease on account of his having it. I hope I make myself clear.

10,212. Then you attach great importance, as other witnesses have, to the effect of alcohol in promoting the acquiring of these diseases?—I believe that that is so. I believe that the doctors, who have made inquiries in thousands of cases, both abroad, in America, and here also, have informed us that about 80 per cent. of the men who acquire these diseases have told them that they have done so under the influence of some kind of alcohol.

10,213. And with the decrease of alcohol there will be some assistance probably in diminishing the prevalence of these diseases?—Yes; it has certainly apparently been so in the case of the army.

10,214. Undoubtedly. Then you say it would be sufficient to demand the instruction of every adolescent, not only on his own moral responsibility and self-respect and respect for others, which you rightly say is the foundation of education, but also on the dangers to which he exposed himself. You think that where the ignorance is perhaps the most serious is that the consequences of sex hygiene extend far beyond the individual himself. You think there is a great deal of ignorance on that point?—I think so. I think that is a very important point with regard to ignorance.

10,215. You think young men do not recognise, when they have the disease, its nature, its very serious results, or that they may infect others and injure the coming race?—I am quite sure that that is true to an enormous extent. I am quite sure that most of the young men, when they acquire gonorrhœa, for instance, do not realise that they are infective long after they have become comparatively comfortable; and it is certainly still more true in the case of syphilis, where it is almost impossible that anybody without special knowledge should understand that they are still infective, although they have no symptoms.

10,216. Then you think that that knowledge ought to be inculcated into every man when he comes to independence?—I think it is only fair.

10,217. You say from official reports in foreign countries you gather the impression that syphilis and ignorance walk hand in hand?—Yes, I have that impression very strongly; but it is on a limited amount of information, such information as has been obtained by the Secretary of State for Foreign Affairs. A large number of reports were sent in which I have been reading, and have abstracted to some extent. They are very scrappy; but as far as they go, that seems to me to be the outstanding feature, or one of the outstanding features.

10,218. Take Bosnia, one of the countries you refer to. You say: "In Bosnia, neither voluntary nor compulsory measures had any effect till a campaign of instruction was undertaken." Do you know if that campaign of instruction has produced good effects?—It is stated in the report that good effects have been produced. Indeed, that particular report is of very great interest.

10,219. (*Sir Kenelm Digby.*) What is the date of that? Is it the Foreign Office Report?—No, this is an abstract of these reports. This is not published as yet.

10,220. (*Chairman.*) You speak of two traditions which are essentially untrue. Have you any idea how

those traditions got about among the people?—No; I practically cannot suggest why, except that sexual desire being a strong thing, it is suggested that continual self repression induces morbid conditions; but I do not think there is more than that in it.

10,221. Do you think that those misconceptions and traditions should be combated: that in any form of general instruction that is given they should be directly mentioned?—I think that they certainly should be. I am perfectly aware, and I expect several members of the Commission will be aware, that, at least, when I was at school, I came away distinctly with the impression that most people were of the opinion at any rate, that it was bad for one to repress one's sexual desires.

10,222. (*Canon Horsley.*) And some doctors taught that?—I am afraid that has been the case; but I do not think you would find it now.

10,223. (*Dr. Newsholme.*) You did not at your school?—No.

10,224. (*Chairman.*) You say that you believe in truth in the nursery; but I suppose you would limit that statement considerably. You go on to say that this is impossible of application owing to the parents' general lack of knowledge and discretion?—Yes. I am trying in the first place to suggest what I think would be ideal, and in the second place, to suggest what perhaps is practicable.

10,225. At present, unless the parents generally have more discretion than they have, you do not think this truth in the nursery should prevail?—I, at least, should not urge that all classes of parents should proceed to tell their children of the manner in which they were born. You might produce very awkward results.

10,226. Then going on to the later ages, you think that the average age at which it would be desirable is about 16 for boys and about 15 for the girls?—I should say that that was a suitable age.

10,227. You think at those respective ages, that all the dangers, apart from physiological sexual facts of these diseases, should be pointed out to boys and girls?—I am decidedly of that opinion.

10,228. You take the schoolboy when he reaches 16, and you say he ought to be given a course of, say, three lectures by a selected medical man. You would apply that to all public schools, I suppose, for the middle classes?—Yes. I think that the authorities of the public schools would have to agree to it; but I do not see any great difficulty in getting that actually done for the elder boys.

10,229. Then you would make lectures compulsory also in the first year of university life, and if possible during the first term?—Yes, I think that is extremely important. Although the proportions are not nearly so bad as they are in the foreign universities, the German Universities, yet there is quite a considerable amount of syphilis contracted at the universities, I think; one of the prominent doctors at Cambridge told me at one time that he wished he could preach university sermons on the subject, taking up suitable cases in the pulpit with him, and he thought it would make an excellent form of sermon.

10,230. As far as the universities and the public schools are concerned, there would be always doctors who are capable of giving these lectures at those institutions. Such institutions would have doctors attached to them who could give the kind of instruction you want?—I think so. If they do not, they can get them from outside.

10,231. Now, coming down to the other classes, you think there should be a similar procedure in the secondary technical and evening schools in different areas. Then you point out the very large number of pupils, 30,000 in the secondary schools and 33,000 on the books of the technical institutions of the London County Council?—Yes.

10,232. Do you think that the London County Council ought to take up this question, and see that these pupils have this instruction?—I think it would be a very useful thing that the London County Council should do so.

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10,233. Would you think it is one of their duties to do it, or should be made one of their duties to do it?—I think it should be made one of their duties.

10,234. Then beyond those classes, again, as you say, there is this large number of 750,000 children at the London County Council schools, and over 90 per cent. leave when they are 14 to take up various employments. That is a great difficulty, is it not? How would you deal with that?—That is a very great difficulty.

10,235. You would not, at the age of 14 in those schools, give them the kind of instruction we are talking about, would you?—You could not give them instruction which would be effectively prophylactic. You can only teach children of that age something about how they were born, and give them some idea of the true arrangements; but it would be impossible to teach them questions of pathology, and it would be impossible and undesirable to talk to them about disease. In fact, I think it doubtful whether they could be taught in the elementary schools, not only owing to the inherent difficulties of it, but owing to the fact that I am informed it is very difficult to get teachers to take on any additional burdens. They have enough already; and, on the other hand, there is great difficulty in introducing external teaching by others than the regular teachers.

10,236. But merely teaching these children some knowledge about the facts of birth would not protect them in the least from the diseases which they may get later?—No. I think it would not to a very great extent.

10,237. Then we come back on the Government again. You say "the Government ought to employ a certain number of medical men (and possibly laymen instructed *ad hoc*) to give lectures on this subject to the employés at large works." I suppose the Government, at all events, should insist upon this sort of instruction to be given to its own employés at the dockyards and factories, for example?—Yes; that would be primary.

10,238. But could the Government interfere between the employés and private firms? They could not insist on that, could they? They could only provide the men and say get them if you like?—Yes, it would have to be voluntary; at least at the start.

10,239. Then you would wish to interest all employers in this question with a view to their getting instruction given to their own employés?—Yes, I think so, and I should think that the Government ought to place itself in the position of offering such teaching to the employers for their employés.

10,240. "We will send you a doctor to lecture all your employees, if you will collect them together and provide a room and the time." That is the line?—That is about the line.

10,241. You say such lectures might well be compulsory for young employés; but how could the compulsion be applied?—The only possible way in which compulsion could be applied, as far as I can see, would be for the time to be taken off their work hours, so that they simply could be sent out of the workshop into the lecture room.

10,242. Do you think that kinematograph shows or lantern pictures could be used with advantage for the instruction of men of that class?—I have seen some kinema pictures in London, but they did not look to me particularly satisfactory, from the point of view of the medical man. They pass before your eyes far too quickly to make out anything much; and from the point of view of the layman, I should think they would merely be horrible. I do not mean to say I think things that are horrible are necessarily not to be used; because I think that some considerable good might come from an exhibition, for instance, such as they have had in various places, of horrible things, and when people go to them they get a thorough fear of the thing on them. I think that fear may be useful; but I do not know that it is extremely useful, and it does not strike me that a kinema show of that kind is altogether very satisfactory.

10,243. You say that lectures of this kind might be undertaken by the local medical officer, or other-

wise organised by the local authority. Do you think it should be made incumbent upon the local authorities to give this instruction through their medical officers?—I should think it extremely difficult to suggest whether it should be in the first instance voluntary or compulsory; but I hardly think it would be possible to apply compulsion on a large scale in this respect, I think they might be invited to take it up, and I think they would respond on the whole.

10,244. You advocate the distribution of suitable literature. Of course you know that that is a very important point, because there is a good deal of quite unsuitable literature about?—Yes.

10,245. You come back to some central body resembling the societies which exist in Germany. You know, I suppose, that the society in Germany is apparently giving evidence of good results?—They apparently think so, so far as I know; but I have not the evidence before me.

10,246. Then you wish to establish a voluntary association something on the German pattern?—Yes. I am not quite sure whether it ought to be a large national society, but it might be a central committee merely.

10,247. Which would carry on a propaganda of its own, and at the same time advise the Government on any measures the Government took in its own institution?—That is my meaning.

10,248. And for that purpose you would provide a permanent medical advisory committee to deal with the special training of lecturers, and I suppose to supervise any literature?—Yes.

10,249. You think that such a body or National Association, or whatever it might be called, ought to be subsidised from public funds?—I think that that would be the most desirable course. Everybody knows that it is extremely difficult to get subscriptions for anything of that kind. I believe at the lock hospitals, for instance, they find it extremely difficult to get public subscriptions, and it is quite likely a propaganda of this kind would get very little financial support. Such a committee, I think, ought to be free from financial pressure. The amount of money to be required would not be very large, and I think the benefits would far outweigh the expenditure.

10,250. The point on which you lay most stress is, that such a movement should be initiated and formed and guided in all medical matters by the highest medical opinion?—Yes. I think it is extremely important that that should be so. That is to say that the basis, so to speak, of the committee, so far as the medical matters are concerned, should be entirely the highest medical opinion. I think, on the other hand it would be absolutely necessary to have a considerable lay element in that committee. I think it would be extremely important. I would not like it to be in any way limited to its medical membership.

10,251. Of course, as you said, you would have women serving on it as well?—Yes, certainly.

10,252. Then I understand practically your system of education is two-fold. This private association helped by Government and Government taking direct action in either compelling or advising institutions which it controls to give instruction of the kind that the advisory committee would recommend. Is not that it?—Yes but I would not strictly divide it up. I think that this central committee might for practical purposes manage the whole concern for the Government. I mean to say, lecturers would have to be appointed and trained, and I think that that might be done under the auspices of this central committee.

10,253. You would in fact make the central committee the main-spring of this new propaganda?—Yes, I think so.

10,254. Have you formed any impression as to the value and possibility of any form of notification?—By notification, do you mean a notification in the sense in which other diseases are notified?

10,255. I was thinking first of the notification which you say exists in Copenhagen?—That need not be, and, so far as I know, is not more than a registration. That is to say, it is for the purposes of statistics, of information.

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10,256. Is the registration of the fact of the disease being diagnosed?—Yes.

10,257. Then it is compulsory on every doctor in Copenhagen to notify any case of venereal disease that comes to his notice?—Yes, I think that is so.

10,258. Do they do it?—I think they do do it. I do not mean to say there are no exceptions, but I believe that people as a matter of fact in a system of anonymous notification do actually notify, but I am not aware what proportion of doctors notify. There may be a considerable proportion of them, of course, who have not any cases to notify.

10,259. But it is compulsory on them under the law to do it, or under a municipal law, is it not?—I believe that is so; but I do not speak with absolute certainty. I think all the Scandinavian countries are the same in that respect.

10,260. I think it is confidential notification?—It is anonymous notification.

13,261. You do not know whether it is very much objected to by the people in Copenhagen?—I believe there is very little objection to it at all.

10,262. And you believe that by the means of notification the authorities at Copenhagen have very much better knowledge of the incidence of the disease than we have, for example?—Undoubtedly better than we have.

10,263. Do you think such a system is possible in this country?—It is extremely difficult to say. If I might take the thing in two stages, I think in the first place that the institutions and the hospitals would, if asked, and as a matter of fact I believe that they have been asked for a certain period to do this, get returns of cases that applied for relief. That of course; so far, would only apply to the public bodies, and the difficulty would be to get returns from the doctors, I personally think it is very highly desirable that such returns should be available, not in order to bring compulsion to bear upon anybody, but simply in order to inform ourselves of the extent of the mischief, and how far it has been remedied, or otherwise. If we do not have some such returns as that, it would be extremely difficult to judge how we were getting on, and what the value was of the methods we were pursuing. On the other hand I admit that there is considerable difficulty in getting private doctors to give even an anonymous notification. There would be no objection from the point of view of the patient. The patients would not mind anonymous notification, but the doctors might object having to do it. But I should suggest that some simple form could be sent to the doctors to fill in once a year, in which they simply stated the number of cases of each disease, and each stage, that they had treated during the year.

10,264. Do you know of any other countries except Scandinavian countries who have any system of notification?—Yes, they have in Italy.

10,265. That is quite recent, is it not?—Yes, but it is very perfect there, I believe. Unfortunately it has so recently come into existence that I think they have not much returns. The latest regulations date in Italy from 1905.

10,266. (*Sir Kenelm Digby*.) Is there any account of it in any way anywhere?—I only got this out of the report that I read from Italy; but also there is some account of it, if I remember aright, in Flexner's new book on "Prostitution in Europe."

10,267. (*Dr. Newsholme*.) I think you attach great importance to ignorance as a main factor in the spread of venereal disease?—Yes.

10,268. That ignorance may be divided into two parts; ignorance on the part of the person himself before he becomes infected, and secondly, ignorance as to the consequences to others?—Yes.

10,269. As far as the first part is concerned, do you think much prevention of disease would occur through teaching a young man of the likelihood of his acquiring this disease? Do you think that influence would be able to overcome the effect of passion?—No.

10,270. Would it make much diminution of the amount of syphilitic disease in the community if every young man knew of the risks to himself?—I cannot help feeling that with certain characters it would have

that effect; but I think it would vary very much with the character of the individual. What I mean is this; that if you have a patient who is going in for that sort of thing, if that is the bent of his nature, he will do it and take his risks. If on the other hand, you have got a person who is a well-intentioned person in general, I think he might be influenced. The man who perhaps comes to grief once with one of these diseases might be prevented possibly from doing so.

10,271. So that some amount of good could be done to the young men themselves in preventing of their acquiring disease?—Yes, I think a small amount.

10,272. But, so far as they are concerned, is ignorance the main point in regard to the prevention of the disease; is it not rather a question of greater control? If I may put it in another way, is it not rather a question of teaching temperance in all matters, not merely in this particular matter?—I agree; and I do not suggest that such teaching should be merely cramming people with facts, but rather to attempt alongside of it to build up their characters, to teach them self-respect and respect for others, which I have said is so important.

10,273. If you were the head of a training college for young fellows, you would rather teach them on those general lines than give teaching specially directed towards venereal disease only?—I am thinking of myself, and what line I should take with regard to a son of my own. It is clear to me that he must know the facts.

10,274. Now we come to the second half of the question of ignorance; the ignorance of the effects of venereal disease. Would you agree that to a large extent the mischief done by men to their wives is the result of ignorance on the part of the men of the mischief they are doing?—In infecting their wives?

10,275. Yes?—Yes, I think so.

10,276. And would you agree that the responsibility of that rests on the husbands themselves, but even more on the doctors who have treated them, they not having given sufficiently candid and explicit advice?—Yes, I think so.

10,277. That point is put very strongly in a paragraph here, which I will read to you, and will afterwards ask you whether you agree with it or not. It is a paragraph in a paper of Mr. Wansey Bayly, in last Saturday's British Medical Journal. He speaks as follows about gonorrhoea:—"It is a matter of great regret—indeed, I feel inclined to put the matter more strongly and to say that it is a shame to our profession—that so many men are told that they are free from all infection and are given permission to marry before any systematic, thorough, and scientific examination has been made upon which such an opinion can be logically based. The average young man is not a blackguard, and if he were told by his medical man that after an attack of gonorrhoea he must not marry until repeated examination enables a clean bill of health to be given, and that if he does marry before such permission is received he will run a grave risk of infecting his bride, he will in the great majority of cases follow his doctor's advice. I consider, therefore that the responsibility of the prevalence of inflammatory pelvic conditions in young married women is shared equally between the doctor and the husband—indeed, in many cases the doctor is the more to blame. It behoves us, therefore, to remember that if we do not constitute ourselves the champions of the innocent wife and unborn children, we shall deserve to be considered their enemies." Do you think that statement is an over statement?—As regards the relative responsibility of the doctors and the men?

10,278. That is so?—I think that the probability is that the doctors are not as frank as they ought to be. Perhaps they fear the consequences possibly; but it is very difficult to throw the complete onus on the doctor in that way.

10,279. I do not think that is suggested; but we may put it this way, may we not? that quite commonly doctors do not sufficiently explain to their patients the extreme importance of the possibilities of infection of future wives?—I do not know. I am

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inclined to think that at the hospitals, at least, the doctors, as far as they are able, do give them information as to the dangers of infection. Of course it has to be done in somewhat perfunctory manner, I suppose; but there are at least some hospitals where printed instructions are given which, if read, would teach the people a great deal.

10,280. Do you yourself attach much importance to the printed instructions as contrasted with the actual personal advice which a doctor can give to his patient on seeing him?—I should prefer both.

10,281. But if you had to choose between the two, I think you would agree with me that the actual advice is much more potent?—Yes, I agree.

10,282. At any rate, we can agree on this; that it is extremely important that doctors by every possible means should be induced to warn as fully as possible their patients of the prospective dangers to the wives and children?—Most certainly.

10,283. And that not everything has been done in that direction that ought to be done?—Certainly not.

10,284. Then so far as your educational propaganda are concerned, you were of opinion that there ought to be some central association formed, some central advisory committee, which, I understand, would have branches all over the country, and arrange for lectures in different parts of the country with regard to these diseases?—That is my idea.

10,285. That is educational work, is not it?—Yes.

10,286. You are aware that there is the Board of Education in this country?—Yes.

10,287. There is a Board of Education in this country for supervising, and partly paying for and controlling education in the whole of this country?—Yes.

10,288. Why not utilise that Board?—I have no objection.

10,289. But if you utilised that Board, and that Board were willing to do the work, would it be necessary to introduce additional machinery of the kind you have mentioned?—I am afraid I am not very well up in the duties of the Board of Education; but I should have thought that the Board of Education would hardly be able to deal with the majority of the processes I am here alluding to.

10,290. The Board of Education could certainly deal with all the adolescents. They have evening continuation schools. The Board of Education give grants to all the medical schools in the country, or a very large proportion of them, and it would be quite easy to expand their functions, I suggest to you, to meet this entirely, while leaving local societies to bring about their own propaganda?—Yes.

10,291. My only suggestion is, it seems a pity to introduce complex additional machinery unless it is shown to be necessary?—I entirely agree.

10,292. If the Board of Education were willing to do this, you would think it is the right body?—Yes.

10,293. But if they, from any reason, red tape, or anything else, decline to do it, then it would be necessary to create additional machinery?—Yes; but what I am referring to here is not entirely the machinery, but a consultative body.

10,294. The Board of Education has on its staff some of the greatest experts in teaching in this country. It also has available yourself and all other experts with regard to venereal diseases to call in to counsel it when it needs counsel. The Board of Education appoints advisory committees as they are wanted on special points as they arise. Does not that meet the case?—I entirely agree that, in so far as it would be both willing and competent to carry out such things, I have no desire in any way to create new machinery.

10,295. Unless that machinery is proved to be necessary?—Yes.

10,296. Passing to the question of notification for a moment; you advocate anonymous notification, in order that we may know how we are getting on, and to what extent the disease is declining. Do you think the information would be sufficiently complete to enable you to judge of that arithmetically by the results of notification?—I am inclined to think so;

I am inclined to think that such results would be significant.

10,297. May I draw your attention to the case of tuberculosis? There is reason to believe that a large amount of tuberculosis in the non-working classes—in the upper middle classes—is not notified, whereas it is notified among what we call the lower classes?—Yes.

10,298. If that is so in regard to tuberculosis, to which no supposed stigma attaches, would it not be very much more so with regard to venereal disease?—It would be so if they were by name, and tuberculosis is reported by name presumably.

10,299. That is an important distinction; you are suggesting anonymous notification, which makes a difference?—That is so.

10,300. But even then, is it likely that the doctor in a first-class practice would take the trouble to send his list of cases week by week?—Unless he was paid for it.

10,301. He would be paid for it presumably; but even then, would he be likely to send his list for the sake of 2s. 6d.?—Yes; I do not see why he should not.

10,302. Would not a much better test of success of your action against venereal disease be the decline in the number of patients coming to the clinics that you propose to set up?—Yes; that might be significant. It might be a satisfactory result; and if nothing else is considered practicable I should certainly consider that is well worth consideration, even in itself.

10,303. You would not regard notification as an indispensable condition of your campaign. A much more important thing in your view, I take it, would be the formation of clinics for the treatment of syphilitics gratuitously, and institutions and laboratories for the diagnosis of venereal diseases?—Yes; I think that the question of finding out how you are getting on, the question of getting statistics of the disease, is a secondary one. I think the important point that we have to deal with at present is to attempt by all means to get those who are diseased cured, in the first instance, and to prevent others from getting disease who have not got it.

10,304. May I ask you a question about this Berlin census? Was it a compulsory census or a purely voluntary one on the part of these doctors?—They were simply asked by the Government to make returns.

10,305. There was no fine attaching to non-compliance presumably?—I am sorry I do not know.

10,306. So that we are not clear whether it was a compulsory return or not; but, in actual fact, only 52 per cent. of the doctors in Berlin did send in returns?—Yes.

10,307. Now, if there was any error in the assumptions in the earlier part of your calculation, and you had a multiplying factor of 6, the error would be multiplied by 6, would not it?—Yes.

10,308. Which raises a very great possibility of error in your final results?—Very great.

10,309. And that was elicited very markedly in the method of calculation backward from general paralysis, Dr. Mott repudiated the 2 per cent., I think it was, and this paper by Drs. Mattenschek and Pilz of Vienna, shows about 4,134 officers were watched over a series of years who had been infected by syphilis, and of those 7½ per cent. became infected with either general paralysis or locomotor ataxia. If anything like that higher figure were taken, it would reduce your estimate of the syphilitic population by about a third, would it not?—By about a half, or from 100,000 to 50,000.

10,310. That illustrates very strongly the thin ice on which we are sliding, does it not?—Yes. At the beginning of my remarks I indicated the very great difference between estimates and actual facts.

10,311. You have already drawn attention to the fact of the number of cases coming to doctors, and there was a possibility that the same cases came several times?—Yes.

10,312. And you had created in this way a sort of stage army, to some extent, passing in and out of the scenes. There is a possibility of that, is not there?—

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Yes. I do not mean to suggest that that stage army comes more than once round a year. Although your cases in one year would probably consist of 800,000 persons, yet they are not all new persons. A certain proportion, perhaps a third, or something like that, have been there before.

10,313. I must confess it gives me pause to arrive at the conclusion that five-sixths of the adult population are infected with these diseases?—Between the ages of 17 and 47, adult male population.

(Dr. Newsholme.) Yes. Is not that too big an indictment, or do you think it is not? If it is a true indictment, it is a terrible reflection on the state of mankind, or is it, as Sir John Collie has suggested to me, that your five-sixths is made up of people who have been infected three or four times over, and it is not really five-sixths of that total population. The cases are five out of six to the population, but some people are infected three or four times over.

(Rev. J. Scott Lidgett.) It is four-fifths, not five-sixths.

(Dr. Newsholme.) Yes, that is so—four-fifths.

(Witness.) The suggestion certainly is, from what I have said, that a number of persons, rather less than four-fifths, say about three-fourths—of the men I am talking of—are at one or other time in their lives, generally between the ages of 17 and 47, infected with one or other of these diseases.

10,314. Would you like to say that about the population of London?—I am not in a position to make statements.

10,315. Nor am I?—I should not be the least surprised to find it true.

10,316. You would not be surprised?—Not in the slightest.

10,317. But still, I think everybody agrees that there is a great deal more of this disease in Berlin than in London?—Yes, that is the general impression.

(Dr. Newsholme.) That seems to be the general impression, and the facts seem to fit in with that.

10,318. You know the housing conditions in Berlin are atrociously bad?—I am afraid I do not know about that.

10,319. Do you know that 50 per cent. or thereabouts of the families in Berlin live in one room?—No.

10,320. That is, I believe, the fact. Is it likely that a decent life can be maintained under those conditions?—No. And, speaking on the subject in general, what you wish to elicit, I think, is my views on the question of overcrowding. There is not the slightest doubt that before we can eliminate these diseases, we have to deal with certain social problems that have really not so far been successfully solved, and the question of overcrowding is one of the most important. You cannot expect people who are housed whole families in a room, to lead decent sexual lives.

10,321. (Mrs. Burgwin.) I think you said that a very large number of infected persons attend quacks. You would think that a very bad thing for them, would you not?—Yes, I think it most unfortunate that they should attend quacks, for the very simple reason that both these diseases, syphilis and gonorrhœa, require highly skilled treatment; and it is impossible that quacks should do very much good, except in so far as they adopt the methods of medical men.

10,322. Could you give us any idea how you would have these quacks, I was going to say, suppressed?—I am in doubt as to whether any actual repressive measures are going to be of much good; that is to say, why people go to quacks at the present day is because they have not adequate facilities for other means of treatment. I have been given to understand that although a considerable proportion of diseased people go to doctors in London, and to hospitals and so forth, yet in the north, a large majority of people go to unregistered practitioners. I think until you provide easy facilities for people, so that they can go to medical men without any difficulty as to hours, and without any difficulty as to being treated in a way to damage their self respect—until you have all these facilities provided for them, you will have all these people going to quacks, because there is no practicable alternative. As soon as you get a practicable alternative you will find the trade

of the quack gradually disappearing, and, moreover, if such a campaign of education is started, as I have suggested, the quack will automatically fall.

10,323. (Sir Almeric FitzRoy.) May I ask a question at this moment? Is not the real reason why a large majority of people go to a quack rather than to a medical practitioner because the quack advertises, and the medical practitioner does not, and therefore the quack brings himself to the notice of the patient, and the medical practitioner does not?—Yes. It might be suggested on that account that quack advertisements in newspapers should be suppressed.

10,324. I should think so?—That I should agree to.

10,325. (Mrs. Burgwin.) That was exactly the point I was trying to get at. You would think it would be a good thing to suppress those advertisements?—I think it is easier to suppress advertisements than to suppress the quacks; but if at the same time that would help to suppress the quacks, I would quite agree.

(Sir Almeric FitzRoy.) If you attempt to suppress advertisements, you must remember that you will have the whole power of the Press against you. There are a large number of provincial newspapers that live on these advertisements to a great extent. That has to be considered.

10,326. (Mrs. Burgwin.) Do you not think that people go to quacks because they think it is secret, and their disease does not get known? Having these diseases they have a great sense of shame, and they go to quacks rather than to medical men, because they think no one will know about it?—Yes. I think it is not because they prefer the quack to the medical man.

10,327. Not because he is cheaper?—I suspect he is cheaper.

10,328. Now, with regard to who should pay for the instruction, it is surely a matter of purely public health to try and cure these diseases?—Yes.

10,329. Do you think the Public Health Department should bear the expense of the propaganda work?—I do not feel adequately up in the subject to suggest which Government department should bear the expense. It has to come out of the taxpayers' pocket anyhow.

10,330. You are very clear that some authority should give this teaching?—Yes, I think so. I feel very strongly on that subject.

10,331. Could you tell us from your own knowledge whether you have any instances of innocent infection with syphilis?—You mean whether one has actually met them?

10,332. Yes?—What do you mean by "innocent"?

10,333. Caused venereally; may I put it like that?—Do you mean acquired otherwise than sexually?

10,334. Yes, I do?—Extra-genital chances?

10,335. Yes?—They are met with in a certain proportion of cases in hospital, but not a very large proportion. I mean, one has seen a considerable number of them. They are met with of course among medical men. This is in the course of their professional duties. That is not uncommon, as you may have heard before, both with regard to surgeons in general, and with regard to dentists. There are various parts of surgery which expose the practitioners specially to the risk of infection. For instance, if I may say, for a short time I held one of the junior surgical appointments at the London Hospital. I was fortunate myself; but I know that others holding similar positions had become infected. So that among doctors it is probably more common than among the civil population in general; but I am sure there is a considerable amount of it.

10,336. You think there is a considerable amount?—I feel sure of it.

10,337. (Sir John Collie.) You acquiesced in the suggestion that the quack was cheaper? You would probably also acquiesce in the suggestion that it is dearer in the long run?—Yes. I am afraid I was perhaps led into acquiescence on a point, that I would not be inclined to acquiesce in. I am not sure he is cheaper. But I really do not know his price. You have to pay for his advertisement anyhow, and it may be he is just as dear in actuality. Certainly he is very much dearer in the long run.

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10,338. With regard to the question of the campaign of education, in the case of a large number of young people from 14 years of age onwards, if they were taught you will recognise there will be a huge number and in view of the necessary expense, and the difficulty of procuring a sufficient number of men, do you agree it will be quite feasible to teach a sufficiently large number of intelligent persons to instruct these people?—I think it would certainly be possible to do so, although it would need a considerable amount of organisation.

10,339. (*Rev. J. Scott Lidgett.*) Do I understand you attach any considerable importance to that statement of yours about fifths; namely, one-fifth who have never contracted disease, one-fifth once, one-fifth twice, one-fifth three times, and one-fifth four times?—Do you mean, do I suggest that is the fact?

10,340. Yes?—No; I am only suggesting it does not necessarily make my figures absurd, because the number of infections is greater than the number of people.

10,341. So that is simply an illustration of the way in which your figures might work out rightly, without your attaching the slightest weight to the particular proportions selected?—Yes.

10,342. And they do not even rest upon a careful guess on your part?—No. It was the first figure that I pitched upon, and I saw that it worked out to half the number of men compared with the number of infections.

10,343. So that they are not even the proportions that would be required in order to bear out your estimates?—No, my estimate is less than that.

10,344. You have laid a great deal of stress upon the necessity of education. Have you had any experience of this sort in giving such education or seeing it given?—There has been very little of that kind done at all.

10,345. I notice, for example, you mention the Alliance of Honour, which is an agency that has done good work, and might be employed perhaps. Have you been associated with that?—I have been to one or two of its meetings, and its teaching is based of course on religious and moral grounds. But on one occasion at least there was a layman who spoke very clearly with regard to the question of disease, and I think the effect was very markedly good.

10,346. So that in speaking to us about the arrangement you suggest, you are not basing your views upon extensive practice, but upon the best general consideration you have given to the subject?—Yes.

10,347. I presume if the clergy, doctors, and school-masters give this instruction under private auspices, there is a good deal of disposition to ignore or belittle it on the ground that it is either their professional duty to do it, or that they represent their own sectional opinion?—Yes, that would be so.

10,348. And you would advocate the State taking it up, because perhaps it would convince the public that it is liable to underestimate the warning of clergy and teachers that there really was a serious danger in these diseases. You think additional weight would be given to all this teaching if it were put on a State basis as against a voluntary basis?—No; I do not think that I am wanting to press very strongly for a State basis. It occurs to one as almost necessary, but it is simply that I want the teaching done. I do not think it would be impossible for a clergyman to help in this way, so long as he had made himself acquainted with the facts.

10,349. But my point is this. Do you not think the public would be more ready to accept warning if it were clear that the State thought it important to give it, rather than if it is given by private associations of individuals?—I should think it quite likely.

10,350. And I presume it would not be necessary perhaps to educate the entire population personally; but the fact that a certain amount of this instruction was given by lectures would cause the knowledge of the facts to be disseminated before long throughout the whole community?—Undoubtedly.

10,351. It was suggested to you that the Board of Education might undertake this. It is a fact, is it not,

that the Board of Education does not give instruction directly itself; but supervises, and to a certain amount supports, the work of local authorities and other bodies in doing so?—Yes.

10,352. So that really that suggestion would mean that the local authorities under the direction of the Board of Education should be called in to give it?—Yes. But I may say that I am comparatively ignorant of those facts that Dr. Newsholme was mentioning, and I did not think previously that the Board of Education would be competent to take up the particular sort of things I am speaking of, for instance lectures to employees at large works, and so forth.

10,353. I presume you do not intend to recommend class teaching upon sexual subjects to children of elementary school age?—Whether it is desirable, or whether it is not, I have indicated that I think it impracticable.

10,354. Would you be in favour of using the closing months of their school life to give personal instruction rather by way of moral influence than physiological instruction?—Do you mean before 14 years of age?

10,355. Between 14 and 15?—As they are approaching that age, I think the moral education ought to be helped out with a knowledge of the physiological facts.

10,356. But I think the general tenour of your views has been that you would put more reliance upon moral elements than upon the merely scientific elements?—As far as the probable infection of the individual is concerned, but not necessarily as regards the spread of the disease in the country.

10,357. (*Dr. Mott.*) With regard to the statement that you made, that I had suggested perhaps 3 or 4 per cent. of all cases of contracted syphilis found a conclusion one way or another in tabes or general paralysis, I should like to set myself right with the Chairman, as he alluded to the danger of making a guess, by saying that I made a guess really on statistics which have been published by various observers. I took the mean between the highest and the lowest, but it is a guess. I think, however, these results Dr. Newsholme has alluded to are valuable, because they refer to deaths, and not as he suggested, to persons suffering from paralytic dementia. There were 4,134 officers, 198 of whom died of general paralysis and 116 of tabes. That would give, as he said, 7·5 per cent. which is very much higher. Can you see any fallacies in that?—I think it was your own teaching that suggested to me that the higher classes, the more intelligent, intellectual classes of society, may perhaps suffer in a greater proportion from these particular sequels of syphilis than the less intelligent and lower educated portions of the community. Therefore it is quite possible, although I do not say I am prepared to support it at all, that we would expect to find a larger proportion in officers of high education than in the ordinary rank and file.

10,358. That was before the discovery of the spirochæte in the brain, was it not, when we believed that these diseases were post syphilitic, and not syphilitic diseases?—I wonder if it makes much difference.

10,359. In Bosnia, you would not estimate the incidence of syphilis by the number of cases of general paralysis, would you, because they say it is hardly met with there. So that there is that possibility of the variable percentage of cases which became paralytic in different classes of the population?—Yes, I think that is so. At the same time, while accepting gratefully any facts that are produced in that way, I do not think such facts as those about officers ought to blind us about the higher proportion that undoubtedly exists in Copenhagen and other places.

10,360. Of course a good many men may not have been notified in Copenhagen, and that figure perhaps be doubled?—Which, the syphilis?

10,361. No, the 13,000?—Yes; they might possibly be doubled. That would again lower the percentage to a figure even lower than two.

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[Continued.]

10,362. Then you referred to the progressive increase of general paralysis, did you not?—In England and Wales?

10,363. Yes?—No. If you look at this coloured diagram you will notice it was aneurysm I referred to which has shown a progressive increase.

10,364. Not general paralysis?—But I will point out this, if you will forgive me taking up your time on a trifling matter. Supposing it is true that general paralysis of the insane and tabes are really of an allied nature; if you take that diagram of tabes and put it on the top of the diagram of G.P.I., you will again get a curve very like the aneurysm curve, and growing in about the proportion of the increase of population. That is to say, if you can reckon tabes and G.P.I. as belonging to one category and not two.

10,365. I think you might do that. But during the last 15 years we have had a stationary population in the county of London, and the death rate from general paralysis in the London County Asylums has not materially increased. The admission rate has been taken as practically about equal to the death rate annually; so that if the admission rate to-day is about 350 yearly, and that accords with the death rate 15 years ago, it would be about the same, would it not?—Yes. You will notice in this diagram of mine it would be very difficult to say at the top of this G.P.I. curve whether it has increased or decreased. It has gone up and down.

(Dr. Mott.) It would vary, because the diagnosis is more perfect now by the Wassermann reaction where it is practised.

10,366. (Mrs. Scharlieb.) Do you think that some assistance might be had if all still-births were registered?—I think it would be highly desirable that still-births should be registered.

10,367. And also, if possible, abortions?—As far as possible. I do not know how far you could do this.

10,368. By qualified midwives even; and then the products of conception and still-born infants, and miscarriages should be sent to a laboratory for examination?—Yes, I know that has been strongly recommended by Dr. Routh in a work recently read which he has just published and which I think is admirable.

10,369. There is such a very large proportion of still-births. As many children die before birth as during the first few months after birth?—If I may say so, my impression after reading Dr. Routh's pamphlet was, that he had very greatly under estimated the number of miscarriages in proportion to those who had died after birth. I am speaking not from personal knowledge, but from the deductions I would make from the statistical curve. The statistical curve rises during the first year of life very sharply backwards to the beginning, and it is still rising there. There must be at least three times as many die before birth as die after birth.

10,370. Then you would also advise the examination of the products of conception to see whether there were spirochaetes?—It would be a very big undertaking.

10,371. Yes, that is quite true; but if it is possible or as many as possible, in order to strengthen our hands by getting some more knowledge?—I think so.

10,372. With regard to the care of pregnant women, I daresay you would suggest, as Dr. Routh and other people have suggested, that pregnant women should declare their condition in order that they should be cared for; that they should receive money or food, or something to enable them to have stronger children. Would you approve of that?—Approve of methods of subvention in that respect, yes. If subvention is to be applied at all, it would be a very useful way of applying it; but I am afraid it would be a very expensive job.

10,373. Then with regard to the education of the young, would you not teach the physiology of reproduction in outline to quite young children?—Human physiology or comparative physiology?

10,734. I was thinking especially of vegetable physiology; and children also invariably ask about cats' kittens, dogs' puppies, and so on. You say yourself "truth in the nursery" and if mothers were sufficiently trained to be able to give truthful answers without

going into too great detail, would you not approve of that?—Entirely.

10,375. And then when the children go to school, the physiological teaching could be more scientific. It is to be regretted that our elementary books on physiology give some idea of the physiology of the circulation, digestion and so on, but there is absolutely nothing about reproduction?—There is very little certainly.

10,376. Is it not a mistake to invest it with an air of indecency and prurient mystery?—Very. In my view that is at the bottom of the whole difficulty. The mere fact that it is hidden from children, and hidden quite unnecessarily, gives them the impression when they come to years of more or less discretion, that the thing is indecent.

10,377. Whereas it should be represented that it is the most gracious gift of the Almighty that men and women should be permitted to imitate him in the procreative act; that we are acting for him in bringing into the world new beings; and therefore it should be invested with every solemnity and all beauty and all honour?—I entirely agree.

10,378. Then you were speaking of the age of 15 and 16. Do you not fear that most boys when they leave their preparatory school are already in possession of undesirable knowledge?—Yes, that is so; but you will notice that I have written according as I think is practicable.

10,379. Quite so?—I do not think you can get at the children in the elementary schools in the form of class teaching at present. It is simply a practical difficulty. I think if it is possible to do so, it would be highly desirable to do it on the lines you yourself have suggested. I am in entire agreement with that.

10,380. So that you would give the knowledge earlier if you found it practicable?—If I found it practicable, in precisely the same way as I think the parent in the upper classes, who had reasonable knowledge of the thing would, as a matter of fact, inform a boy or girl before they went to school, where they would be likely to acquire the knowledge by other means.

10,381. Then with the mothers who are not so well educated and not so well fitted for it, might not a great deal be done through the agency of the women's unions, the Parents National Education Union, and so on? Might not the mothers themselves be taught, so that they might be able to pass the knowledge on?—Absolutely. I should like that every one of these agencies should be used to help in this education.

10,382. (Mrs. Creighton.) You were speaking about the educational campaign in Bosnia. Did the report you mentioned give any details as to the nature of that campaign?—I have a statement here. I may say this is simply my own very short statement on the subject. If you would like to hear something of it, the statement is this: "Syphilis in Bosnia-Herzegovina" is of immemorial standing, and it is said to be "due to Turkish military movements; but the habits in this country of social life are conducive to the spread of syphilis, which appears to be largely due to the common use of pipes and eating utensils; hence chancres in the mouth are exceedingly common." The disease in fact is a social as well as a sexual disease; that is to say, what might be commonly and somewhat unfortunately spoken of as innocent infections are far more common in proportion there than in this country. I believe that is so in other countries, such as Russia. You do not object to my reading this?

(Mrs. Creighton.) If the Chairman allows it, I shall be very glad.

10,383. (Chairman.) Certainly; but do not make it longer than necessary?—The point really is, they first of all tried voluntary methods and they found it was no good. Then they tried stronger methods and tried to make it compulsory, and they found that was no good. Then things got worse and worse, until in 1902 it became practically an epidemic. They did not know what to do, and they adopted teaching children in primary schools and distributing information on the subject by all possible means. Apparently this effort met with very great success, and the statement here is, that in the five years preceding 1911 they had got

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[Continued.]

most of the districts of Bosnia into their grasp on the subject, and three-quarters of the whole of Bosnia came under certain regulations. Out of the total population of 624,000, they succeeded in examining 492,000 or 79 per cent. of the whole of the population. They found out 41,000 cases of syphilis and treated them. The statement is made that the authorities believe they have reduced the total active infective syphilis at the present time to about 3,000 cases. Whether that is true or not I cannot say, but they evidently consider they have done a thing such as has not been done in the whole of Europe.

10,384. (*Mrs. Burgwin.*) Were the ages given of those children who were taught in the primary schools?—No, it does not say.

10,385. (*Mrs. Creighton.*) In the educational campaign that you contemplate, would you separate instruction on these matters from general instruction on health?—No; I do not see why.

10,386. Would you not think it desirable that this should come in as part of a general instruction as to how to maintain health in the community?—Yes; I have no objection to the larger measure.

10,387. My own feeling is that by giving it an exceptional place you perhaps rather give it too great a prominence in the minds of young people, and if it came as part of a general health instruction it might take its place better?—If some movement of that kind in general were made, I should have no objection to it forming simply a part of that.

10,388. In your educational campaign, would you not also think it necessary to include a teaching on the possibility and the great advantages of chastity?—Yes, certainly.

10,389. You would not teach simply the dangers that result from unchastity without also teaching the possibility of chastity?—Certainly not.

10,390. Then with regard to public schools, do you think such education could well be given by the school doctors?—It is a point I am very doubtful upon; I should hardly think so.

10,391. You think an outsider would be better?—I think so. It is quite possible that the school doctor might have an exceptional influence with the boys, but again, it is quite possible that he might not.

10,392. Do you think, with regard to teaching about these diseases, for the young, at any rate, anything very elaborate is necessary, and that general warnings as to their gravity and possibility of transmission to children would not be sufficient?—To the younger ages at school?

10,393. Yes?—I think so.

10,394. And that, therefore, actually it is not such a tremendous business to contemplate. It is only that the minds of the public have to be turned to it, and the teachers have to get enough instruction to be able to give it. Is it necessary that it should be given by medical men in all cases?—I think it would be desirable. I mean the question of public schools and universities is a very small question, and I do not see why they should not be given by medical men. I think, moreover, it is important that the boy who is leaving his public school should get more or less detailed information, although it should be more detailed at the university itself.

10,395. You think detailed information is advantageous for him?—To the boy leaving a public school because he is just entering, or has already entered, the most dangerous zone in life.

10,396. Then as regards the younger children, you seemed to dismiss the possibility of instruction as out of consideration; but supposing the teachers were properly trained in the training colleges to give general teaching, would it not be possible?—General health teaching?

10,397. General health teaching, including warnings against sexual excesses?—I should welcome it if it were possible. I was only trying to keep within what I thought practicable.

10,398. Then one question about the enforced notification. How would you prevent, in such a system as you described, the same person being notified more than once by different doctors in

different places?—I admit the difficulty of doing so. I admit there would be a considerable amount of overlapping. But one can only feel the probability is that the amount of overlapping in one year would be about the same as the amount of overlapping in the next.

10,399. So the statistics would only be of relative value?—The figures would bear a constant approximation to the fact.

(*Mr. Lane.*) I will not trouble you with any question.

10,400. (*Sir Malcolm Morris.*) The Royal Society of Medicine has taken a great deal of interest in this matter, has it not?—Yes.

10,401. And they have appointed a special committee?—Yes.

10,402. Have you an official position in connection with it?—Yes.

10,403. What are you?—I am the Secretary.

10,404. Would you mind telling the Royal Commission what they have done?—I do not think that will be a very long matter, because as a matter of fact the idea in the mind of the President was to get together a fairly representative committee of the hospitals in various parts of London. This is the present constitution of the committee, in order that the views of the various hospitals might be conveniently got together and discussed. One has not got on extremely far up to the present with it; but it is very pleasing that I think the majority of the hospitals appear to be quite willing to help in every way they can, enabling us to discuss how improvements in hospital treatment and so forth are to be carried out.

10,405. Do you think as a result of this, the hospitals are taking greater interest in these questions?—I am afraid I cannot say how far it affects them.

10,406. Are you urging hospitals to take more active means of teaching?—That is intended to be one of the upshots, I think.

10,407. Have the hospitals begun to take a greater interest in teaching students about this matter?—I believe they are already. I am not attributing to the committee at all, but to the general interest which is being aroused on the subject.

10,408. The committee of the Royal Society of Medicine have not specially urged the hospitals to give greater instruction?—No, the committee has not attempted to urge anything.

10,409. In what other direction have they done any work besides?—We have been attempting to ascertain what happens at the present moment—how patients are treated—and a series of questions were submitted to the various hospitals to answer, as to whether there were any special beds, and various questions of that kind. Replies have been received from a large number of them; but at present I think the committee is particularly anxious to discuss on the one hand this very question of education.

10,410. Do you consider at the present moment there are adequate opportunities for treating these diseases in the hospitals of the country?—No, I do not. I have no doubt you are acquainted with the progress which has already been made at the London Hospital; but I am not aware that any definite steps, or so definite steps, have been taken at other hospitals. I believe that there are one or two other hospitals that already are moving.

10,411. Has the committee of the Royal Society of Medicine formed any idea as to the way in which extension in the methods of treatment should proceed?—No.

10,412. Do you think it is advisable in each hospital to form a new department for the treatment of these diseases?—Yes.

10,413. What would you call that department?—I should call it by some non-significant name.

10,414. Have you seen Mr. D'Arcy Power's evidence, or heard what he suggested: that it should be called the "genito-urinary" department?—No.

10,415. Do you think that is a good name?—I do not feel inclined to criticise one way or another; perhaps it is too suggestive.

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[Continued.]

10,416. It has also been suggested by another witness that there should be dispensaries or some other form of institution for the treatment of these diseases scattered about the country. Do you think that is a good scheme?—It has been done in most other countries.

10,417. Special dispensaries?—Yes.

10,418. Which do you think would be the better scheme: to have the extension of some department of the general hospitals, or to have special dispensaries for the treatment of the disease?—I think extension of the general hospitals, most decidedly.

10,419. Then you are not in favour of special lock hospitals?—No. I believe that special lock hospitals have done extremely good work in the past; but at the same time I do not think they are calculated to do the same amount of good as special departments at the general hospitals would do; simply on account of the fact that people do not like to go to lock hospitals, and there is no objection to going to general hospitals.

10,420. As regards the formation of a special society for propaganda of these subjects, do you think it would be better to be done by a Government department, or do you think it would be better to be done by voluntary aid?—The suggestion which I have made was, that of a voluntary body merely receiving subventions from the Government. But whether it would be practicable for the existing education department to manage the thing, is a question I have not considered.

10,421. Do you know the details of the German society?—I know a certain amount about it.

10,422. Do they get any subvention from the State?—I could not say.

10,423. Is it not entirely a voluntary society?—I am under that impression, but I would not like to say they receive no subvention.

10,424. How many years has it existed?—I have not any of the literature on me, and I am afraid I cannot say.

10,425. Have you read their last report?—I am afraid I have seen it, more than read it.

10,426. Do you think they have done useful work?—I am under the impression that they are doing extremely useful work.

10,427. Have you read the reports of the American societies?—Yes, I have read some of those reports.

10,428. Do you think they have gone to work judiciously in the matter?—It is a difficult question.

10,429. Would you suggest a society in England of the same sort carried on on the lines of the American one?—I am not prepared at this moment to do that. I am rather under the impression that on the whole it would be better to form what might be called a National Committee than a National Society; but I am open to conviction on that.

(Mrs. Creighton.) May I ask if you mean by the American Society the Rockefeller Institute?

(Sir Malcolm Morris.) No; this is a special society which has published a large amount of literature on these subjects to the public.

(Mrs. Creighton.) What is it called?

(Witness.) The Society for Sanitary and Moral Prophylaxis.

(Mrs. Creighton.) That is the Rockefeller one; he largely supports it.

10,430 (Sir Malcolm Morris.) But it was originally started by Prince Morrow?—Yes

10,431. Do you not think there is a great deal of literature published by that society which it is exceedingly unwise to propagate?—Yes, I should think so.

(Chairman.) Thank you.

The witness withdrew.

TWENTY-SEVENTH DAY.

Friday, 20th March, 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.S.C.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Dr. LOUIS PARKES and Dr. A. K. CHALMERS called and examined.

10,432. (Chairman.) Dr. Parkes, you are the medical officer of health of the Metropolitan Borough of Chelsea?—(Dr. Parkes.) Yes.

10,433. How long have you held that appointment?—For 23 years.

10,434. And, Dr. Chalmers, you are the medical officer of health for the City of Glasgow?—(Dr. Chalmers.) Yes, I am.

10,435. You are also President of the Society of Medical Officers of Health?—Yes, during this year.

10,436. How long has your appointment at Glasgow lasted?—Since 1891.

10,437. You have a large experience?—Yes.

10,438. I propose first of all to deal with the memorandum which the society has drawn up for us,

then proceed with Dr. Parkes' scheme; and lastly, if time permits to-day, to go on with the personal evidence of Dr. Chalmers. Upon this memorandum we gather that the Society of Medical Officers of Health consider that there is a great lack of exact information regarding the prevalence of syphilis and other venereal diseases. They also call attention to "the misleading or incomplete character of certified causes of death, particularly of the remote causes of death from diseases of the nervous or circulatory system." Then they call attention to "the absence generally of any systematic provision for the recognition and treatment of the diseases in question," and then they ask us to note "the relationship of syphilis to miscarriages, still births and deaths in

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[Continued.]

"the first year of life, especially the first four weeks." Those are the views of the needs of administrative changes in this direction of the Society of Medical Officers of Health generally?—Yes.

10,439. And the results of the experience you have arrived at in carrying out your duties?—Yes.

10,440. You suggest in this connection that if there is any "revision of the administrative provisions for" the registration of births, deaths, &c., the medical officer of health should be made the official "responsible for [such registration]." Do you mean that all registrations of all kinds should be made to the medical officer of health?—(Dr. Chalmers) Registration of deaths, I understand.

10,441. Deaths from all causes?—Yes.

10,442. Not considering deaths in which venereal disease is involved?—No, not specially; deaths from all causes.

10,443. Then the medical officer of health should be the officer responsible for such registration?—Yes; that he might have an opportunity of making such further inquiry at the time as might be deemed necessary. The impression, I think, of the society was, that knowing that the certificate was going to a layman, some of the ill-defined diagnoses that have been referred to in these other paragraphs might be explained.

10,444. At present I take it the medical officers of health are not brought into this registration question at all?—(Dr. Parkes.) No, not at all.

10,445. So that that would be a change of a radical character?—(Dr. Chalmers.) It would.

10,446. Make you, in the first place, responsible, whereas the officers of the Registrar General's Department are now responsible?—That is so.

10,447. What would be your relations to the Registrar General?—That would become a matter of consideration. I take it a medical registrar will practically be related to him as the present officials are.

10,448. Your returns after having been dealt with by you, and possibly altered by you as the result of some of your inquiries, would then go to the Registrar General for the purpose of his statistics?—Yes, just in the same way as they do now.

10,449. And you think in that way you would get a more truthful return of the causes of death?—Yes. I think it is quite likely. (Dr. Parkes.) And it would save the enormous number of after inquiries that are made now by the Registrar General's office into the causes of death. It would be a great saving in that way, because the medical officer of health would be able to supply practically everything the Registrar General wanted, and there would be very few subsequent inquiries. (Dr. Chalmers.) Yes.

10,450. What happens now is, the Registrar General makes inquiries if he is in doubt through the medical officer?—No, to the medical practitioner who signed the certificate, and that might be months afterwards.

10,451. You think all that kind of inquiry should rest with the medical officers of health?—Yes, I think we all agree as to that.

10,452. The whole of your society agrees to that?—Yes.

10,453. Now, coming to your practical proposals. The first is:—"That the local authority be required to" place at the disposal of the medical practitioner "facilities for examining by bacteriological, or other" methods, blood, or any discharge, which may, in the "the opinion of the medical practitioner, throw light" on the existence or nature of the disease." You wish to enforce on the local authority the duty of providing institutions of that class?—I think the impression rather was that opportunities should be given; not that a man need take advantage of them unless he felt his duty to his patient required it, but that he should have somewhere to which he might appeal in order to assist him in diagnosis.

10,454. But you want to make it the duty of the local authority to provide those facilities?—Not that it should be compulsory, but that they should

have power to do it. That was the impression the society had.

10,455. Then "required" means that they should be asked to do so, I suppose, by the Local Government Board?—I think that question probably was in connection with the power the Board has under section 130 of the English Act; but Dr. Parkes is more familiar with English legislation than I am. A similar question emerged in Glasgow when we began. I made a suggestion for the consideration of the clerk as to whether we could carry out this on the Public Health rate, and I take it we can.

10,456. In any case you are strongly of opinion that these institutions should be available for the free disposal of the medical practitioners who may have to deal with these cases?—Yes, that was the impression of the society.

10,457. Going on as to how that would be used, you wish the practitioner to supply a statement showing the age, sex, condition as to marriage, number of children and leading features of the disease present. I suppose you purposely omit that no name need be given in that case?—We thought that the introduction of the name would at once put a barrier on the usefulness of the facilities. I mean if the name had to be disclosed it might lead to no sample being sent at all and no use being made of them.

10,458. Then as your proposals stand, a practitioner who had doubts will get from your institution the tests that he requires carried out, and he will have to supply a statement showing the details that you have laid down?—The impression was that that would be a condition of the sample being examined; that something was told as to its origin.

10,459. Do you think from your experience that medical practitioners generally would take full advantage of such an institution under the conditions that you lay down?—My experience in Glasgow is that a very great deal of use is made of it. I mean in the six months or so it has been going on, we have had between 300 and 400 samples sent in.

10,460. Then in Glasgow you have an institution just of the kind described as necessary?—Yes, quite of the kind.

10,461. And that institution is you say working well?—Working well—working without any hitch. There is never any difficulty with the doctors.

10,462. And you hope it will get better and be more and more used by practitioners?—Yes; I think it is being more widely utilised.

10,463. That is as far as dealing with examinations. Now you come to treatment. You think the local authorities should be prepared to offer facilities for treatment to any person suffering from all these diseases, I suppose you mean?—Yes.

10,464. Who will comply with the conditions laid down by such local authority either in dispensaries or hospitals under their own responsibility, or by arrangement with general or other hospitals and dispensaries as may be considered desirable. Then you throw the further duty upon the local authority of being prepared to offer full facilities for treatment of these diseases?—(Dr. Parkes.) I do not think the society regarded it as a duty, but rather that they should be empowered to do so if they wished. I think that was rather the feeling of the society. (Dr. Chalmers.) Yes. (Dr. Parkes.) It says nothing about the duty; but if they desired to do so they should have the facilities, or should be empowered to provide treatment. I do not think the society was at all agreed that it should be the duty of a local authority to provide treatment.

10,465. Then you think it should be left optional with the local authority to do it?—Yes, I think that was the view of the society.

10,466. But, on the other hand, the local authority is fully empowered now, if they like, to do all these things, is it not?—In England, as regards treatment, yes.

10,467. And in Scotland, Dr. Chalmers?—(Dr. Chalmers.) I take it that we are.

10,468. So that to carry out this No. 2 proposal of yours, no fresh legislation and no fresh authority is required by the local authorities?—Probably Dr.

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[Continued.]

Parkes may be able to answer that for England; because you will find in item 4 on the second page it is suggested that the Local Government Board issue an administrative order under the endemic infectious diseases clause of the Public Health Act.

10,469. At present there is nothing to prevent the local authority providing all these facilities except, I suppose, the question of finance. Is that so in England, Dr. Parkes?—(Dr. Parkes.) Yes, I think so. I think you will be up against this; that a considerable number of authorities will not be prepared, especially as regards treatment, to expend money out of the rates for treating a class of disease which they regard as very largely, if not entirely, due to the result of personal misconduct. I think there will be that feeling amongst a great number of them; and therefore it would be undesirable, I think, to force anything upon them which they would object to on what they would regard, perhaps, as religious or moral grounds.

10,470. Then the difficulty is both religious and financial?—Religious more.

10,471. Religious in some cases, financial in others. Is that it?—Yes. I do not think the finance would trouble the big towns, the large authorities; but I think very likely religious or moral feelings would in many cases.

10,472. (Canon Horsley.) Religion would be put as an excuse for stinginess?—It might be.

10,473. (Chairman.) As regards Chelsea, in your district, Dr. Parkes, are there arrangements, either in the hospitals or attached dispensaries, or in out-patients departments for dealing with these diseases?—General hospitals, like St. George's, deal with them, but only to a limited extent, I think. Of course there are hospitals which are debarred by the terms on which they are founded from treating such diseases at all.

10,474. Then, as far as your metropolitan borough is concerned, you are prepared to say that the facilities are not nearly adequate at present?—No, I think they are not.

10,475. What do you say as regards Glasgow, Dr. Chalmers? Have you there in your hospitals or dispensaries or out-patients departments sufficient means of treating as many cases as ought to be treated?—(Dr. Chalmers.) As a matter of fact there is very little provision of ward accommodation for the treatment of these diseases at the moment. Only one of the general hospitals in Glasgow has a ward set apart.

10,476. Only one?—I mean apart from the Lock Hospital. The Royal Infirmary has a small ward of 15 beds set apart for venereal disease of a primary character, or all kinds. The Lock Hospital is of course in existence with 80 beds, and an average number of residents about 40; but the other two large general hospitals do not have wards, and any primary cases they treat are done in the dispensaries. They do, of course, admit later manifestations of syphilis into the wards.

10,477. You say also as regards the very important city of Glasgow that the facilities are quite inadequate?—They are not organised.

10,478. And that they might be adequate if they were properly organised?—If they are properly organised. Of course one never knows how much of the treatment of these diseases is being carried out by unregistered practitioners. That is always an element of uncertainty.

10,479. In the Glasgow hospitals generally, does the religious objection arise?—I am not prepared at the moment to say whether in the constitution of some of the places there is not a condition laid down that no patient will be admitted who is suffering from illness, the result of his own misconduct; but certainly for a considerable period, I think a number of years probably, it will be regarded as one of the reasons why facilities are not given up to patients of that class.

10,480. In any case, as experienced officers of health you are both clear that facilities are not sufficient, and they are not sufficiently organised?—Not sufficiently organised, I think that is correct. (Dr. Parkes.) Yes.

10,481. And you both think it is possible without any very great difficulty so to organise and improve facilities as to make them sufficient to meet what we

may call a national demand?—Yes. (Dr. Chalmers.) I think it is quite possible.

10,482. Now we go on to No. 3. You wish such facilities as will be provided under any new measures taken to be "available for any person applying therefor, whether resident or not within the district of such local authority." If I may ask you, why do you open your arms so wide?—(Dr. Chalmers.) Just because one knows that in smaller places particularly men would not go to local institutions. I had quite a definite illustration in December. Directly it became known what we were doing, I had a letter from a man in the country saying he understood the Corporation of Glasgow were offering facilities for recognising the disease. He said he believed he had it, and he wondered if, not being a resident, he could get advantage of the facilities. That is just an illustration. I told him what he might do locally to begin with. He said "I am not going to consult any local doctor," and as a matter of fact he ultimately came in Glasgow to see me.

10,483. Then as matters at present stand, you are in favour of admitting anybody to the advantages that may be gained apart from the geographical area in which he lived?—I think that is the only way in which you could get it at all universally accepted, I mean, if you compelled a man to go to a particular district, the chances are he would not go.

10,484. Is that also your opinion, Dr. Parkes?—(Dr. Parkes.) Yes, very strongly. I think that is the crux of the whole thing: this question of free treatment anywhere for any person.

10,485. You think probably that as facilities are better distributed and better organised there would not be the need of going from one district to another, and people would use the district in which they resided?—I do not know. Generally, I think the people would like to go to some district where they were not locally known at all. They would prefer that in the case of small towns especially. Take for instance, Brighton and Eastbourne; there would be a great deal of interchangeable treatment probably between the two places, or even smaller places than that. Brighton is too big perhaps, but in the case of places which are not very far apart, people who might be known going into a particular place, they would not mind going to another town where they are not known; but they would very strongly object to being seen entering a hospital in their own district.

10,486. Then in order to encourage people to make further use of these institutions, you think this third provision of yours is sound?—I think it is essential.

10,487. Now we go on to your proposals for carrying out those purposes. You want the Local Government Board to issue an administrative order or orders under the powers conferred by section 130 of the Public Health Act, 1875, as amended by the Public Health Act, 1896, declaring venereal diseases to be endemic diseases threatening the health of the population. That, I take it, the Local Government Board has already powers to carry out?—Yes, I think so.

10,488. And it could notify venereal disease as being endemic if it chose. Is that so?—Yes. It is so in the case of tuberculosis, which is probably even less infectious than these diseases.

10,489. If you did that for venereal diseases, what would follow? We know that certain results do follow where other diseases have been claimed to be endemic; but if you extended the treatment to venereal diseases what would follow? Do you think the notification would then be complete?—Not necessarily. The Board would have power to put anything into their regulations that they thought desirable, and to extend them from time to time. My view was, and I think it is the society's too, that they should be limited first of all to giving facilities for organising treatment and diagnosis, and stopping there until the results have been seen.

10,490. But if you make this change by including this disease among endemic diseases, that would have the effect of notification, would it not?—No, I do not think so.

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10,491. And if a practitioner has found a disease which is then noted as endemic, would not he be in the same position as with regard to smallpox?—No, he would not necessarily be compelled to notify. There would have to be a special regulation compelling the practitioner to notify in the regulations. If there were none, he would not be obliged to notify.

10,492. Then you wish to take that further step and make it incumbent upon him to notify?—Not at present. None of us are agreed upon that.

10,493. Then if notification or notice were taken, what do you think would be the practical effect of inclusion of venereal diseases among other diseases?—The effect would be that provision would be made for their recognition and treatment by means of a national organisation. I think that is the effect it would have.

10,494. Yes. You would make provision, but you have not the means at present of getting the people to take advantage of the provisions?—No, you cannot drive them into it; but you can give them facilities, and let them come into it voluntarily.

10,495. Then I may take it you mean by making this declaration under this administrative order, the effect of that would be to enable the facilities for treating the diseases to be increased and made more effective, and that you would wait for any further action to see how that plan acted?—That is my view, and I think it is the view of the society.

10,496. Is that your view, Dr. Chalmers?—(Dr. Chalmers.) Might I say, I think this "4" represents this opinion. Certain things are defined for the purposes of the Public Health Act, and syphilis is not one of them.

10,497. No?—And it is not included in the Notification Act. What I think is in the minds of the members at present is just the question as to whether a local authority would be entitled to spend money either on diagnosis or treatment. Now the same question emerged, as I say, with my own authority, and I made this statement here suggesting that we should carry on certain treatment, which I will explain afterwards: "Provided the clerk is of the opinion that this extension can properly be borne under the 'Public Health Assessment.'" That is the whole point involved in this reference under paragraph 4. It is not a matter of notifying. It is whether it is necessary in order to enable the local authority to undertake the cost of diagnosing and treatment if possible.

10,498. Then the effect of this administrative order which you contemplate would be, to make the public regard these diseases as much more grave, and therefore would justify the local authority in making special efforts for treatment. That is your view?—Yes. It would certainly have the effect of impressing them with the need of administrative handling; but, chiefly, it might place the local authorities in a position when it could without any hesitation expend money for that purpose. It is a purely financial necessity. It is not the matter of notification, but simply finance.

10,499. It is suggested that the authorities should take any measure which they may suggest?—Yes.

10,500. Then we come to the third: "the Local Government Board should make regulations under such order or orders empowering the local authority to make facilities for the recognition of venereal diseases and for their treatment, either in dispensaries or hospitals under the local authority's own responsibility or by arrangement with general hospitals and dispensaries at the cost of such local authority assisted by the aid of a Government grant." First of all that empowers the local authority to create facilities if it chooses. You rather want the Local Government Board to stimulate the local authorities into action?—It just occurred to me when we were discussing that question of the present power, that this is really the clause where the question of power is raised: as to whether local authorities have the power without an order of this sort.

10,501. That is not settled?—That I think is probably not clear. As I say, I raised the question in that sentence I quoted here from a report a year and

a half ago. I raised it then, and it was not dealt with by the clerk, and I assumed, of course, we had the power to do that without any order from the Board in Scotland.

10,502. Anyhow, what you proposed would make it perfectly clear whether the local authority had power to create facilities or not; and also you put in at the end "assisted by the aid of a Government grant." I suppose you regard that Government grant as absolutely essential if these new facilities are to be effective?—I think we do as a society, for two reasons: first of all, the gravity of the condition generally; but, secondly, because we were of the opinion that a local authority should undertake the treatment even of people who came from other districts, and that in order to equalise the burden, as it were, local expenditure should be subsidised to a considerable extent by a grant.

10,503. Have you formed any idea of the form that grant should take and the way it should be distributed?—The modern methods of treatment are about as expensive as the treatment of diphtheria. Roughly, it means 20s. or 24s. for salvarsan treatment, and that might run to a good sum a year.

10,504. Do you think the grant could be based upon the number of salvarsan treatments given in the institution?—That might be quite a good basis to estimate; or population might be another.

10,505. The differences of population might be considerable with regard to the prevalence of syphilis, might they not?—Yes, I think that is quite true. I think it turns on a large proportion. The number of cases treated might be the basis of the distribution.

10,506. The number of cases treated will be a comparatively expensive ground?—Yes; it would be an expensive matter to undertake.

10,507. Do you think it would be advisable for this Commission to recommend that grants should be given on the basis of the number of treatments by salvarsan?—That would be undoubtedly the most expensive part of the work, whether it was carried out in dispensaries or in hospitals. The provision of facilities for diagnosis would be much less expensive. The main bulk of the cost would be in treatment.

10,508. If ever it comes to a Government grant, you want some convenient and fair way of distributing that grant and estimating it in special cases. You think on the whole this would be a fair way?—That occurs to one at the moment as being quite fair; but you see there is so very little known as to the amount of treatment wanted that one is groping more or less.

10,509. It might vary?—Yes, it might vary.

10,510. What do you think of it, Dr. Parkes?—(Dr. Parkes.) I do not very much agree with it myself. I am in favour of the whole thing being done on national lines as a national service without local authority grants at all. I think there would be considerable difficulties in the way of assessing it by salvarsan treatment alone, without regard to the number of patients. It is not only syphilis, it is gonorrhœa, and operations to be done and so on. I think it would be impossible to do it upon those lines.

10,511. When you say doing it on national lines, it must of course be done in connection with existing hospitals and dispensaries?—Yes.

10,512. It is rather an amplification of them than the creation of new institutions we want. Can you make any other suggestion as to the form the grant should take?—I should think the number of patients for the different diseases. Having regard to salvarsan and the operations that had to be performed, you would have to take them all into account, I think.

10,513. You rather base it on a *per capita* basis, the number of people treated for all these diseases?—That would be the fairest way, I think.

10,514. Now coming to those institutions for testing purposes; would you propose to create new institutions, or to develop any existing institutions which are attached to existing hospitals?—The diagnosis?

10,515. For testing purposes—medical laboratories?—I should not think there are sufficient of them now

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except in large towns. There would have to be some new ones created, I should think in various cases.

10,516. Should they be directly connected with the hospitals, or be separate institutions created by the Government?—I have not really considered that.

10,517. Have you considered that, Dr. Chalmers?—(Dr. Chalmers.) Our practice is to carry it on in connection with our own laboratory. The Public Health Authority in Glasgow has a bacteriological laboratory, and that is where our work is being done.

10,518. Your present laboratory with additional assistance would be able to do all that Glasgow requires?—It is doing it now. I mean with regard to diagnosis. I do not say all; because there is always a certain amount done in the general hospitals, but what is done apart from that for private practitioners and for many of the dispensaries. From many of them we get samples.

10,519. Do you think it better that these institutions should be of a separate character, as I gather yours is, or should be an integral part of the general hospitals?—My feeling is that the local authorities, if they have any responsibility at all, should have the diagnosis entirely in their own hands, I mean they should organise it in that way.

10,520. You would rather have these institutions then under the local authority?—I mean for the purposes of recognition. I am speaking, of course, entirely on the experience we have of how easily it works.

10,521. I suppose your conditions would be special and peculiar, because you have such a very large population. What is your population?—Over a million.

10,522. That would alter the conditions a great deal; but for a city like that, one institution such as you have a little developed, increased with the aid of a Government grant, would be the very thing that is required?—That particular institution, I mean the laboratory, I should think is quite equal to carrying out the tests so far as we have found. It is perfectly ample at the moment.

10,523. But you think very much more use will be made of that laboratory in the future than has been so at present?—I think so; I hope so.

10,524. At any rate, you could undertake a great deal more work at that laboratory than you now do?—It is very much a question simply of staffing. We added an additional assistant at the time this was begun last Autumn.

10,525. Now, turning to your memorandum, Dr. Parkes, it covers some of the ground which we have been over already?—(Dr. Parkes.) Yes. I think paragraph 1 is already covered.

10,526. When you say "a registered medical practitioner," what do you quite mean?—The ordinary medical practitioner who is registered; a qualified medical practitioner. They must all be registered you know.

10,527. I am afraid we know that a great many irregular persons are actively engaged in treating these diseases for profit; and as we are on that subject, have you formed any opinion as to how that practice is to be checked?—No, I am afraid I do not think it would be advisable to try and check it by any kind of penal code. The only way is to attract people to the better class of treatment you are going to provide, or hope to provide, for them. When they find they get good treatment by well known surgeons in their own district or neighbouring districts they can go to, and get free treatment and advice, and it is all done practically under secret conditions, they will leave the quacks very largely.

10,528. You think we ought to compete with the quack by giving better and cheaper treatment?—I think so. I think if you had a penal code you would only make him a martyr and it would tend to drive people to him.

10,529. Then you say any medical practitioner should be able to obtain free of cost microscopical examination?—Yes.

10,530. And also that he should be able to obtain application of a Wassermann reaction to any samples he might send in?—Yes.

10,531. That would be a recognised right on his part to obtain that information?—I do not know by providing facilities whether you can give him a right. If you are going to give him a right, if he was not able to avail himself of it he might pose as an injured person and sue for damages. Do you mean in that way?

10,532. I mean, if the medical practitioner asks for this test, microscopical or otherwise, to be made, he is to get it done for him for nothing?—Yes, if there are facilities provided.

10,533. Then you think the regulations should provide that facilities should be given by which this medical practitioner should have the benefit of the advice and consultation of the medical officer authorised to treat venereal cases in general institutions?—Yes.

10,534. I do not quite know what that means; but I suppose in any case if you went to this medical officer he would get advice, would not he, under the ordinary etiquette of the profession?—That is, where a medical practitioner is privately treating himself a case of venereal disease, and he wants the advice of an expert upon his case, he should be able to take his patient to the place assigned to the treatment and get an opinion, if he so desires, from the expert who is examining on behalf of the local authority or the Government. I think that would be very valuable, because in some of these cases no doubt a medical practitioner has great difficulty in ascertaining whether the patient is suffering from one of these diseases or not, and if he can get a free opinion on that he would avail himself of it with great advantage to his patient.

10,535. But it would probably lead to treatment of a particular kind, you think, and that this medical practitioner would probably not be able to give him?—No; in that case he would transfer his patient to the institution.

10,536. I suppose you think, for some years to come at all events, medical practitioners as a whole will not be able to give salvarsan treatment?—I think there are very few at present capable of doing so; but no doubt they will increase as the younger men come forward who are instructed in it; but there are very few at present who are capable of doing it.

10,537. In your second paragraph you deal, I suppose, with the beginnings in your organisation. You say: "The regulations should empower, but not require, the councils of counties to confer with the councils of county boroughs within the area of the county as to provision of gratuitous medical and surgical treatment by means of general hospitals." So that you start your organisation by asking these people to confer together as to the best means of meeting the requirements?—Yes; having regard to what I said about the views taken by some people, especially possibly by certain members of local authorities, on the moral question with regard to the treatment of these diseases, I think it would be undesirable for the Local Government Board to require any council to have anything to do with it if they do not wish to.

10,538. But some conference would take place as to the provision within the county area of laboratories in a suitable sense?—Yes.

10,539. So that that is the first step which you would take?—Yes.

10,540. In fact you would organise local opinion to bear upon the new requirements?—Yes, that is so.

10,541. Then, taking the matter a step further, if they agreed to confer, you ask them to prepare a draft scheme of the method suggested for providing this free medical treatment, and also for the provision of the requisite laboratories?—Yes; taking the county councils and county borough councils, because the county boroughs are the towns and the county councils are the country districts, it is essential that the two should work in co-ordination, otherwise the people who live in the country will be left out in the cold, and they will get no benefit from it.

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10,542. How would this conference work in the country in which you are engaged, Dr. Chalmers? Would such conferences lead to good and practical results or would they merely end in talk?—(*Dr. Chalmers.*) I think we are rather differently situated in Scotland; because in counties our local authorities are the district committees, and they would, within their own area, I have no doubt, carry out as well as they could, if it were necessary, corresponding arrangements to what the boroughs might do. That is, if you take a county like Lanarkshire, in which Glasgow is situated, there is a very large industrial population there with a very excellent health organisation, and they have already, as a matter of fact, followed suit in the matter of Wassermann; but the difficulty in all the counties would be the absence of necessary hospital accommodation. The suggestion of treating one from any area would meet that difficulty if the persons went just to the hospitals, as they do now for other diseases; I mean go from one local authority. Boundaries do not tell in the matter of hospital provision. I am thinking of general hospital provision.

10,543. Then you think the difficulty is rather increased hospital accommodation than the provision of these laboratories—the practical difficulty?—I would rather put it this way: that it is organised accommodation that is wanted. For example, just yesterday morning I was telephoned before I left by a doctor with regard to a private patient. She had primary sores, and he had nowhere to put her. He just asked, "What can I do?" It was a girl who would not have gone into a lock hospital, yet there was no place for her in the general hospitals.

10,544. Do you think it would be better, if this Commission sees its way, to recommend some general outline of a system arrived at from all the evidence we have got, or to start these conferences all over the country, which may perhaps lead to years of talk, disagreements, and no results?—I do not think conferences in Scotland would be necessary if the local authorities were assured that they were acting quite within the Act in organising, and were asked to do it.

10,545. What do you think, as far as England is concerned, Dr. Parkes?—(*Dr. Parkes.*) Do you suggest that the central body should undertake the work without consulting the local councils at all? Do you say that?

10,546. No; I was saying it was just possible that a good outline scheme could be got out and recommended, and then local opinion taken upon it, rather than starting what might be rather controversial discussions all over the country?—I am afraid if you did that there might arise local opposition. Local councils, county borough councils especially, if they were not consulted about these arrangements, would view the whole thing with some suspicion, and it would be likely to arouse a good deal of local opposition.

10,547. (*Sir Kenelm Digby.*) May I ask a question following up the answer you gave just now. Dr. Chalmers, about local authorities in Scotland? Do you think they would have the same moral objection that Dr. Parkes has spoken of?—I do not think so.

10,548. You do not think they would?—No, I think not. I think if they understood it was a duty that was being laid on them they would undertake it. It would become entirely a question of finance.

10,549. You do not think they would feel any special moral objection because the diseases are a consequence of vice?—No, I think not. I have never heard that suggested in Scotland.

10,550. (*Chairman.*) If these were drawn up on the principle or lines of the memorandum of your association, would not that be a good thing to start these local people on?—That was the object we had in drafting it in that particular way. May I say this? At the present moment we are treating ophthalmia neonatorum; we are treating also a certain number of children who are properly lock hospital children, but we treat them because of their youth. The lock hospitals said they could not isolate them properly; that they had no provision for it, and as a local authority we are now treating them. There has never

been any suggestion as to its being immoral; or any such suggestion at all.

10,551. Now, going back to the memorandum, you say: "if the county council, or the county borough council, decline to take any steps to give effect to the regulations, the Local Government Board should be empowered to take the necessary action to make provision for medical and surgical treatment and for providing facilities for laboratory diagnosis." That is the "bludgeon" clause?—Yes.

10,552. If these people will not do anything, the Local Government Board come down upon them and practically enforce it?—No, not enforce it; do it themselves, without asking the local people to have anything to do with it.

10,553. Which, of course, would be a very much more expensive thing to do?—I do not know about more expensive; but I think it would be departing from the system of local government of the country if the Government had to do it in that way, but it might be necessary in order to fill up lacunæ and gaps in the administration. It might not be necessary except in very few places; at any rate, not many places; chiefly in the North of England I should imagine.

10,554. But if it were necessary, of course it would follow that lock hospitals would have to be created, against which there is a good deal of evidence?

—The Local Government Board might make the necessary arrangements with the existing hospitals—not necessarily lock hospitals—make the same arrangements as the local authorities, the county councils, and county borough councils would have made, only make it for them instead of getting their co-operation.

(*Canon Horsley.*) On that paragraph 4, I suppose the word "decline" will include the word "omit"?

(*Chairman.*) I suppose so.

(*Canon Horsley.*) There might be cases where they did not decline, but simply did nothing.

(*Chairman.*) Yes, and did nothing. There would probably be more cases of that than others.

10,555. Then you say: "The approved institution should be"—by "approved institution," I suppose you mean an institution which is going to receive Government grant, and therefore be under a certain amount of supervision?—Yes.

10,556. You want it to be made incumbent upon the institution that receives the grant, that the hours should be such as are most convenient to the patients in the locality?—Yes. You see, in the case of people living in that particular locality many of them would prefer attending in the evening, after working hours. On the other hand, if that institution was treating people coming in from considerable distances in the county or elsewhere, afternoon hours would probably be better. Arrangements would have to be made to suit the class of people who came, whether they were strictly local people or coming from a distance.

10,557. Then when patients come into these approved institutions, they are asked whether they would like to give their names and addresses or not, and if not you would only treat them as numbers?—Yes.

10,558. You would, I suppose, if you could, get their names?—I think you should get as much information as you can without compulsion.

10,559. Another thing which you would enjoin on those approved institutions would be to keep a full register with histories of the patients?—Yes.

10,560. And this medical history and so on would be valuable for increasing the general knowledge of these diseases?—Yes.

10,561. And this approved institution could also make a quarterly report to the Local Government Board and the medical officers of health of the counties and county boroughs, which I suppose would be in the ordinary form?—Yes.

10,562. Similarly the laboratories for diagnostic purposes are to keep a register and to give such particulars to the Local Government Board if they require them?—Yes.

10,563. Then we have dealt with this point about the medical practitioner who shall not be required to disclose the names?—Yes.

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10,564. And you admit what we all see: "It is evident that the apportionment of the expenses of administration to municipal or local sanitary areas would present the greatest difficulty." Therefore, if some simple and comparatively just method of distribution could be arrived at, it would be an important point?—Yes; the question of finance no doubt would be a very important one, because many local bodies, if asked to contribute out of the rates for these purposes, would like to know how many of their own people had been treated, and things of that kind might give rise to a great deal of local trouble and opposition. If it was all paid for out of the national funds, this sort of question never would arise.

10,565. Then you think the Local Government Board would have to appoint inspectors qualified to supervise the working of these laboratories?—I do not see any objection to that. I do not know whether my friend Dr. Chalmers would have any objection to the supervision of his municipal laboratory?—(Dr. Chalmers.) It would come, I imagine, under the same power that the Local Government Board inspectors at the moment have when they visit our general hospital.

(Dr. Parkes.) They do not visit your laboratory, do they?—(Dr. Chalmers.) No. (Dr. Parkes.) Because you have no grant. But evidently if there is a grant, the thing should be supervised by a centrally appointed inspector.

10,566. (Chairman.) Then after a lapse of two or three years from the coming into operation of this sort of scheme, you think the Local Government Board would be in a position to determine what further measures might be necessary and would then be better able to determine whether any form of compulsory notification could be introduced?—Yes. You have to create your experience, I think, first of all; ascertain the amount of disease in the country, and the best methods of dealing with it, before any measures like notification or any kind of penal action is taken with regard to them. I suppose eventually something of that sort will be necessary, but I think you have got to get your experience—whether two or three years is sufficient I do not know; perhaps it should be longer; still, it would come in time. These questions would be bound to arise, and further action if necessary should be taken.

10,567. As matters at present stand, you are entirely opposed to any form of compulsory notification even of a confidential character?—I think so. I think it would defeat the objects we have in view at the present time, providing facilities for people going voluntarily to hospitals. It would simply tend to defeat that particular object.

10,568. And you agree to that Dr. Chalmers?—(Dr. Chalmers.) Absolutely.

10,569. You look for great improvement upon the working of a system such as you have outlined, and you say the public health of the nation will be vastly improved in consequence?—I think there is no doubt.

10,570. That will be only, of course, if the diseased public take full advantage of the facilities you are going to provide from them?—Yes; provided they did that, some of the worse features of gonorrhœa and syphilis would disappear entirely.

10,571. And with that you think will follow a general promotion of morality arising from the general enlightenment of the public on the evils of these diseases?—I think so. I think a great deal is due now to ignorance, and when the public are really enlightened on these subjects, as has been the case with other diseases, they look upon them as serious, and apart from the moral question, will take steps to avoid them.

10,572. You propose that the Local Government Board should issue a paper in which the dangers to health of venereal diseases are conveyed in popular terms, and the necessity for early treatment and its prolongation until a cure is effected, and the dangers to other persons whilst the patient is still infected; that all these things should be driven home in a carefully drawn out circular, or something of that kind?—Yes; I think it should be left in the hands of the medical profession. I do not very much approve of any information on this subject being given in a sort of

broadcast way to anyone; but I think it should be left to those in the medical profession who have to deal with these cases, who get the young who come for treatment and so on, and not in any sense to be made the subject of education in schools, or anything of that kind. I think it would be most undesirable.

10,573. I understand you wish something quite different to that?—Yes.

10,574. But you wish the Local Government Board to issue this circular?—I think it should have Government authority, and come from the highest medical authorities of the country.

10,575. With the agreement of the medical profession in the first case, and then the authority of the Government granted?—Yes; the Local Government Board might confer with the Royal College of Surgeons and Physicians in England, Scotland and Ireland, in drawing up something which would be really useful in this way.

10,576. To whom should this popular circular be issued?—I should issue it to all the medical profession right throughout the United Kingdom; but especially of course put it in the hands of the approved institutions and the hospitals where those patients come especially.

10,577. Would you also make it compulsory on the hospitals and the medical practitioners to give one of these circulars to everyone found infected?—I think they would do so if they were asked to do so.

10,578. But you are strong on the point that the circular should be issued on the authority of the Government?—Yes, I think so. I think that is a very important point; it should be a Government circular.

10,579. Do you agree with that, Dr. Chalmers?—(Dr. Chalmers.) In a note I sent last night I rather suggested that this Commission should undertake the lines I had in my mind; the parallel of the alcohol circular of the Physical Deterioration Committee; that the Commission itself will have sufficient information by the time it has finished to concentrate all the information available, and pointing out the dangers in after life of early acquiring the disease. I do not think you get in early enough if you give it only to those who are already infected.

10,580. Then you do not think the doctors who receive this circular would consider that their professional capacity is slighted by its being assumed they do not know of this?—It did not occur to me that the issuing of the circulars through the doctors was quite the best channel. My feeling was if one could appeal to the outline of a circular in the report of this Commission, and make the same use of it that one made of the alcohol circular, or of the findings rather, because it was not a circular—it was converted into a circular and poster, and many forms it took ultimately; but it was really the conclusion of the Commission embodied in a few telling paragraphs—these things might perfectly well get into general circulation.

10,581. Do you think it is desirable they should get into circulation?—I think they should be couched in language which would be unobjectionable.

10,582. By young people of all sexes and ages?—I think so. I have not thought precisely the lines the circular might take; but it seems to me if you are going to educate the public at all, you must begin in some way of that sort.

10,583. Now we come to paragraph 18, dealing with the National Insurance Act. You think that nothing in the regulations should entitle medical practitioners on the panel to refuse treatment, because free medical treatment has been provided in an approved institution and is available to the patient?—(Dr. Parkes.) I think that is important.

10,584. You think that is important?—Yes, because there may be a tendency amongst the panel doctors to send all their patients suffering in this way for treatment whether they wish it or not.

10,585. But in many cases it would be much better for the patient that it should be done?—No doubt it would be better; but still, there are many people who perhaps would not like it. At any rate, at first I think it would be better to avoid the principle of compulsion in these matters altogether, and make it entirely at

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the will and disposition of the patient himself, or herself.

10,586. The possibility is that if this organisation was working well the panel doctors would be relieved from this class of patient altogether?—Yes, they very quickly would.

10,587. You think that would happen?—Yes, without any compulsion in the matter.

10,588. Then you speak again of the bacteriological institutions. Have you formed any idea of the number of institutions of that kind which might be required in the metropolitan area?—I should say that London would have to serve an enormous area for bacteriological diagnosis—practically all the home counties; perhaps some of southern counties as well as eastern. But London would have to be a centre for treatment, and of bacteriological work for a very large area. It would have to be all thoroughly worked out, I suppose, by the county of London, and by the various counties surrounding London. It would be a very complex matter, I think, as regards London; because, you see, evidently London is the centre both as regards all kinds of means of transit and also the great scientific centre of the whole of the country. Use should be made of London in every possible way for providing these things for the immediate surroundings.

10,589. You think one or two large institutions in London serving all the surrounding counties would be the best arrangement?—I think I should certainly, at any rate at first, make use of all the existing laboratories and work them all in a common organisation. For instance, the Lister Institute, which is nearest to my district would probably serve very well for the south-west part of London and the south-west counties. Then there would perhaps be others in the city serving the eastern counties, and the north, and so on. There are a considerable number of laboratories in London doing this work, and they probably can all be utilised. As regards treatment, if any patient is at liberty to go anywhere, there would have to be a very general scheme for providing treatment in the various London hospitals. I expect all the large general hospitals would be quite willing to take this up, and work it in connection with the Government or county council, under arrangements made by which the medical profession should know generally where they could send their cases to from all round London.

(*Chairman.*) I think I will postpone for the present the separate memorandum sent to us by Dr. Chalmers, and go on with the two papers I have dealt with.

10,590. (*Sir Kenelm Digby.*) Dr. Parkes, as I understand, this scheme which you give us in this paper makes it entirely a question for the Government and for Imperial funds to support these approved institutions, and generally to bear the whole of the expense?—That is my view. My view is, in places there will be a great deal of local opposition and local feeling aroused by this matter, and it would give rise to so many undesirable discussions in local places by uninformed people—ignorant people—people who possibly may make it a question of even local politics?

10,591. Besides, there is nothing, or only to a very small extent, local about these diseases. Of course one place may be rather more subject to it than another, no doubt?—Yes.

10,592. But still your proposal, as I understand, is that any person who is suffering from these diseases may get treatment in approved institutions anywhere?—Yes, anywhere.

10,593. You consider that is an essential part of your proposal?—Yes. Both Dr. Chalmers and I are agreed on that, and the society we represent too are all agreed about that.

10,594. And that you put down as quite a first principle?—Yes.

10,595. And therefore in any organisation which we may recommend, we should bear that in mind, and really endeavour to find a scheme for organising the treatment of these diseases on a national basis?—Yes. My view is if this question is to be fought out, as it must be fought out at some time or other, it had better be fought out in Parliament, and that Parliament should decide whether public money should be expended

upon these purposes to which many men and women will object, and dealt with finally and decisively there, rather than dealt with all over the country by uninformed ignorant people.

10,596. I quite see the point of that. You speak in paragraph 13 of your memorandum of the Local Government Board inaugurating a special department. That, as I understand, is intended to be a sort of central office or registry, or whatever you like to call it, superintending and dealing with all these various approved institutions all over the country?—Yes; very much in the same way as the Board is now dealing with tuberculosis on those lines.

10,597. And you would make that a sort of central office, I suppose, as we call it, for the registration of venereal diseases, or something of that kind. I mean, you would confine it to venereal diseases?—Yes.

10,598. Just as at present you confine the other office to tuberculosis?—Yes.

10,599. Then the approved institutions, as I understand, would keep a registry of every case, and I suppose forward them to the central institution?—Yes, quarterly reports.

10,600. So that the central institution as a central board or a central registry, whatever you like to call it, would really have a complete list of all persons who had been treated for venereal diseases in any approved institution?—Yes, that is so.

10,601. That is your argument?—Yes.

10,602. Do you think it would be possible in any way to extend that so as to really cover the whole of the ground of the private patients as well as the patients who receive treatment in a private institution?—Not at first. You might eventually.

10,603. I am afraid we should not do it without, what you deprecate so much, a little compulsion on the part of the law?—I think that might come later; but I doubt whether you could do it that way.

10,604. If it came later, would you regard that as a very desirable thing?—Yes; undoubtedly, if you could get information as to the private cases treated, it would add enormously to the value of the national statistics.

10,605. Not only perhaps the statistics; but it might be useful perhaps for other purposes?—Yes.

10,606. Take a matter which I think our enquiry centres round very much, that is the question of marriage; the prevention of marriage of persons who are suffering from disease or in an infective state, which is a most important point. Do you think that could be done?—Could it be done?

10,607. I was expecting that answer. I am afraid you have not very much faith in the efficacy of the law?—No, not in these things.

10,608. Let us assume then for a moment that there was a law passed, making it an offence for a person to marry if he was in an infective state. Just assume that. I do not ask you whether you think it is practicable or desirable. It would be very desirable would it not, to have a means of ascertaining whether that person was in an infective state—whether he had ever suffered from syphilis, for instance?—You could only obtain that information from his doctor if he had one.

10,609. I did not ask you how it could be obtained. I asked you whether it would not be very desirable?—Desirable undoubtedly to prevent such marriages; but I do not see how you are going to do it.

10,610. If it is desirable, it is rather a question for the Commission to see whether there is a way of doing it. However, I will not follow that up. It would be very desirable for various purposes to have a central registry of these cases as complete as it is possible to get it?—Yes, quite so.

(*Dr. Newsholme.*) Would you ask Dr. Chalmers if he agrees with that?

10,611. (*Sir Kenelm Digby.*) Yes?—(*Dr. Chalmers.*) Did I understand you suggested the formation of a black list for people suffering from venereal diseases?

10,612. Not a black list?—Well, a register of persons who suffer from this disease?

10,613. Yes?—A central registry?

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10,614. Yes; but I am not suggesting a central register of names?—(Dr. Parkes.) I understood without names and addresses, simply for statistical purposes.

10,615. Yes. I would not guarantee there might not be means of finding out the names and addresses; but in the first instance a man comes to an approved institution suffering from this disease, and he comes to get advice. In the first instance, I suppose there would be an entry made. His name, or the name he gives at all events, would be known at that approved institution?—Yes.

10,616. Probably there would be an entry of his name and address there?—If he is an insured person he has to give his name.

10,617. I am not dealing with insured persons—I will come to that in a moment; but suppose the name is given there, there is a means, but I will not take you into that, of identifying a person without giving any name?—Yes; I do not approve of this sort of method, I think.

10,618. I rather gather you do not; but still, it is possible?—Yes.

10,619. And it is desirable, as you say, to have this central registry, because, even if nothing else, we should get much more complete statistics. Now with regard to the question which you have just touched upon, the question of quacks. Do you go so far as to say it is not desirable to suppress quacks?—I do not think it is desirable now.

10,620. Why not?—I think it would excite a great deal of opposition amongst the public generally.

10,621. Do you think so?—Yes, I think so. I do not think they are prepared for it even now.

10,622. Have you any ground for saying that? What ground have you? I am speaking now only of quacks with regard to those particular classes of diseases. I am not talking of persons generally?—Prevent unregistered persons from treating them?

10,623. Treating these particular diseases—making it an offence?—Yes. It is very desirable; but I doubt very much whether any kind of penal action would not defeat its own object. I think, as I said before, it would be better to offer the facilities to the public for getting proper medical treatment, and then they will gradually drop going to the quacks.

10,624. You know that you can at present bring a penal action if an unregistered person acts. If, for instance, a chemist prescribes across the counter you can sue him: or, rather, you cannot, but an informer can?—Yes.

10,625. Has not the objection to that rather been that it is a clumsy way of going to work, and it is really ineffective? Have you ever heard of any public opposition to a system of that kind?—Which?

10,626. Of penalising quacks, preventing it by law?—I think in some cases it is necessary to do so; but there are very few, I think.

10,627. Can you imagine a stronger case than the case of quacks pretending to treat venereal disease extorting large sums from people?—No; they are some of the worst undoubtedly.

10,628. And pretending to a knowledge which they have not got, preventing the persons from getting real treatment, and giving them treatment which is worse than useless. Can you fancy a stronger case than that in the public interest?—No.

10,629. Do you mean to say there would be a strong sympathy with a person who acted in that way, so strong that you would deprecate having any law at all?—I think an opinion of that sort might very soon be manufactured, especially amongst the poor. They would think that these people were being proceeded against by Government; that it was intending to make martyrs of them, and so on.

10,630. Might not that be the case with a great many other things besides?—Yes, that is so.

10,631. I mean here you have a tremendous mischief going on. We have a mass of evidence to that effect. Are we to make no effort whatever to attempt to stop it?—It would be extraordinarily difficult to get evidence, either because people themselves will not come forward to give evidence in these cases or other

reasons; you might make a penal enactment, but it would really become a dead letter.

10,632. I do not know whether you know there are a whole series of cases, if you look into the law books, where the Apothecaries Society have taken action against people for that reason?—No, not these particular cases. Not these venereal quacks.

10,633. Yes, I think so?—I really do not know very much about that. That is my own opinion.

10,634. I only want to know why you think we ought to hold our hands, and not make any attempt to stop what is really a gigantic evil?—It is a matter of argument. Of course opinions might very well differ on that point. I only offer my purely personal opinions.

10,635. (Dr. Newsholme.) Would you mind asking Dr. Chalmers if he agrees no action should be taken against quacks. Do you take the same view?—(Dr. Chalmers.) I do not see that it can be taken effectively, and I very much doubt the desirability of it.

10,636. On what ground?—My feeling is that you must carry public opinion with you, and public opinion means an educated opinion in this matter. The quack will die when the people cease to go to him, but not before that.

10,637-8. One of the great points of Dr. Parkes' evidence has been that we are to rely on public opinion, and not to take legal steps—not to recommend an alteration in the law, but simply to wait until public opinion ripens?—I think it will be quite difficult at least, if not impossible, to exclude the venereal quack and leave the other one; I think that would be a practical difficulty.

(Sir Kenelm Digby.) I do not want to discuss it. That is all.

10,639. (Sir Almeric FitzRoy.) Dr. Chalmers, you spoke of the gaps in our knowledge owing to the extent of this irregular practice. Do not the cases which are treated by unqualified persons ultimately come to the knowledge of the regular practitioner?—I think ultimately they will.

10,640. Just so; so that there is no ultimate gap in your knowledge?—But you see one does not know.

10,641. But what comes of the persons treated; they are not cured by the quack, are they?—I take it they are not.

10,642. Therefore, I presume their state gets rapidly worse, and they either come within the knowledge of the medical practitioner, who signs their death certificate, or I presume they come to some medical practitioner to be treated?—You see he may die of another disease altogether. I mean quite frankly another disease.

10,643. But I should think that is unusual, is it not?—Many of them must drift into poor houses and hospitals; but what I meant by the gaps rather was this; that there is no coherent view you can get just now of the prevalence of them. You have samples taken of persons in institutions, the proportion that respond, and you know of some cases attending general hospitals; but after all that is not a complete picture of the disease. You may be quite right in saying individual cases will come to knowledge later on in the majority of cases, but still the gaps I am afraid are there during the currency of the primary part of the disease.

10,644. But does not the local medical authority know pretty well who are carrying on a business of this kind?—I am afraid I was rather thinking of it in the form of remote affections, determined either by syphilis or gonorrhœa, I mean nerve affections, heart affections, brain affections.

10,645. I do not think either of you gentlemen have altogether satisfied our curiosity as to whether it would be impossible, or even inexpedient to penalise this sort of practice. You say you are afraid of going beyond public opinion; and then, as Sir Kenelm has suggested, you seemed to rely upon public opinion to do the work without these prohibitions. It seems to me a rather inconsistent attitude?—I am afraid I have forgotten the first part of your question.

10,646. I want to know why you think that visiting with penal consequences the persons who practice

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irregularly would be a disastrous step; would tend to defeat its own object?—If you attempted to suppress one kind of quack, how would you define him to begin with? Is it because he used a particular kind of drug, or does not use it?

10,647. Because he is unqualified to practise medicine?—That would include many other varieties.

10,648. True. But these diseases being a special danger to the community, you would begin interfering with irregular practice in the case of these diseases, that might lead to a more general interference, such as you have in many foreign countries, as no doubt you are aware?—If a man did not have anyone he could go to, believing that he would not disclose his condition, he might be disposed to suppress it until things got very much worse.

10,649. But why should a quack be less suspected of the intention of disclosing his state than an ordinary medical practitioner? Why should the quack be treated as if he practised under the seal of the confessional, and the ordinary medical practitioner did not?—I mentioned an illustration of a man who wrote to me from the country who, after I had recommended him, would not go near a doctor in his own place.

10,650. Is not the real reason why these people prefer the quack to the medical practitioner, because the quack advertises very freely, and the medical practitioner does not?—(Dr. Parkes.) Yes, that is so, I expect; and he advertises quick cures without operation, and things of that kind.

10,651. That is so. Then surely, using the term "making a man a martyr" is rather a questionable term to use about people of that class?—(Dr. Chalmers.) Of course it is what the public will think.

10,652. Taking another matter altogether, the sale of exciseable liquors is confined to licensed persons. Am I made a martyr because I cannot sell beer, or is anybody in this room made a martyr because he cannot sell beer? Why, if it is a question of the good of the community, should you hesitate to make martyrs in such a case?—(Dr. Chalmers.) You are prohibiting the selling of exciseable liquors because it is a source of revenue, and you are not allowed to do it without contributing to the revenue.

10,653. No doubt that is so?—Is not that differentiated altogether from the quacks, who, as Dr. Parkes says, offer to do things quicker than other men.

10,654. The danger to the public is not a financial one, I admit; but it is a hygienic one, which is more serious?—I think he exists in connection with venereal diseases, because the patient regards it as being kept quite secret.

10,655. Has he more security that the thing will be kept more secret by the quack than by a qualified medical practitioner?—(Dr. Parkes.) No, I should not think the patient looks at it in that way so much. He thinks the quack is going to cure him quicker.

10,656. Quite so; in consequence of these obnoxious and pernicious advertisements?—Yes.

10,657. Would density of population be a satisfactory basis for the distribution of the grant you are advocating should be made? We understand that the prevalence of these diseases varies probably in some sort of proportion to the density of population. Would that be a practicable basis, do you think, for the distribution of the grant to be made?—(Dr. Parkes.) Yes; I suppose it would be the only feasible one.

10,658. You think that would be the basis?—Yes.

10,659. Then have either of you formed any estimate of the approximate cost of the scheme you recommend in its entirety?—No, I am afraid not. I have not thought of the cost of it.

10,660. (Mr. Lane.) Dr. Parkes, what do you think would be the attitude of the medical profession to a scheme such as that mentioned by you which involves a national treatment? Do you think there would be opposition to it?—I do not think so. I think there would be no more opposition than there would be to municipal schemes.

10,661. But it would deprive a number of doctors of a considerable supply of their patients?—Very few

I think. Of course the better class patient would not avail himself of this. With regard to the other patients, a great many of them would be insured persons undoubtedly. They would be practically all adults who would avail themselves of it, and I do not think the medical profession would look upon it with any repugnance at all from that point of view.

10,662. Though it would deprive them of part of their profit?—Very little indeed.

10,663. There seems to be a large number of cases of venereal disease that go to the panel doctor now?—Yes; but then you see the panel doctor would still get paid for them, whether they went on to the approved institution or they did not. He is paid a capitation fee, you see, for the number on his panel, and he would be rather pleased to get rid of them; at least, some of them would, I take it.

10,664. Another question has occurred to me. How are you going to appoint the experts who are to be selected to treat these diseases?—I think in probably most of the cases they will be appointed by the managing authorities of the hospitals. That would be left to them; to choose the person who should treat, subject of course to the approval of the Local Government Board, and the county borough councils if thought desirable. I should not think it would be. Probably the hospitals and the Local Government Board would settle that.

10,665. So that you would have a special department at every general hospital?—Every large general hospital willing to undertake this work; yes.

10,666. Have you considered any appropriate name for that department?—I think that was one of the difficulties. You must not call it "venereal." I do not know what you can call it. Probably it would be looked upon more as a skin department.

10,667. In the Borough of Chelsea have you a laboratory yourself?—No; our work is done by the Lister Institute for Preventative Medicine.

10,668. How are the payments made?—The payments are made by the borough council for each case.

10,669. For each Wassermann re-action?—Yes.

10,670. Do you get a number of tests and a number of re-actions done?—We have only just started it.

10,671. Then how long has it been going on?—Two or three months.

10,672. Is that all?—Yes, just recently.

10,673. Do you get any patient from a distance taking advantage of this?—No, they cannot, because the names of the doctors must be given with the blood sent; so it is entirely confined to the Chelsea district. We do not undertake to do anything beyond Chelsea.

10,674. Then in your district the only general hospital is St. George's?—St. George's is really not in our district at all. All our poor people go there, and it is our local hospital.

10,675. And I understand there patients are not admitted with venereal disease?—I would not say that, but I do not think they have really any facilities for treatment there.

10,676. I think your words were, that patients were not admitted into general hospitals for treatment of a disease caused by their own misconduct?—In a great many hospitals that is part of the system. It is one of the rules and regulations governing the administration of hospitals. I do not say it applies to St. George's. I do not know.

10,677. But a large percentage of cases, you say, with venereal disease, are not caused by the patient's own misconduct?—A large percentage are not.

10,678. A large percentage?—I would not like to say that.

10,679. All cases of congenital syphilis, for instance?—Yes; in children, of course, none of them are caused by the patients, it is the fault of the fathers and the mothers; but in the case of adults the percentage of what you may call innocent syphilis or gonorrhœa is a very very small one. I do not suppose it is 5 per cent.

10,680. Would the cases of tertiary syphilis be excluded?—Excluded from treatment?

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10,681. Yes?—No. But in the course of time tertiary syphilis will be very rare if treatment is really put on a proper basis.

10,682. I have one question, Dr. Chalmers. The Lock Hospital at Glasgow has 80 beds?—Yes.

10,683. You said between 30 and 40 of them are occupied?—Yes; about 40, I think, is the average probably of beds occupied.

10,684. We understand the disease is very prevalent in Glasgow. Is there any objection to their going into the hospital?—None.

10,685. But one would have thought 80 beds would hardly be sufficient for a town of a million people amongst whom venereal disease was somewhat prevalent?—Yes. I do not understand why they should only have 40 beds on the average occupied, because they approached the health committee about 18 months ago to ask us to take over younger children. I imagine it lies in the structural conditions making it impossible for them to separate the children from the adults. That was the case in fact.

10,686. Do you think that the name places any obstacle on the patients coming in?—I am sure it does. I mentioned an illustration that had come to my knowledge yesterday of a private patient of a doctor. He just said quite frankly through the telephone: "She is not a girl who would go into the Lock Hospital," so she must be one of a class who would not go. I think they frankly recognise they are prostitutes who come in. That was the objection to the children going in there.

10,687. (*Mrs. Creighton.*) You have been speaking of the moral objection which was urged against providing free treatment for persons with venereal disease because it is caused by their own misconduct. Have you heard that objection frequently urged, Dr. Parkes?—(*Dr. Parkes.*) Yes, I think it is a matter of common knowledge. We had a very large meeting about this at the Society of Medical Officers of Health the other day, and quite a number of medical officers said they thought the councils in their districts would object to having anything to do with venereal disease, providing the money for treatment, or anything of the kind. I think it will be a very prevalent feeling in parts of England.

10,688. May I ask you how you yourself would answer that objection if urged?—I think I should answer it in this way; that we are looking upon this as a public health matter, and it is very necessary for the health of the nation that something should be done to prevent the worst effects of these diseases; secondly, it is not only a question of those who contract disease by their own misconduct, but also of those who are secondarily affected through no fault of their own, forming as they do in the aggregate a very large number of innocent sufferers.

10,689. Yes; but would not your objectors then say: "I object to having this looked upon as a public health matter; I consider it as a matter of public morals, and you ought to work for the improvement of public morals"?—It is a question which is the stronger of the two, health or morals—which is to prevail.

10,690. I was only wondering how you would meet that argument yourself?—I should meet it in the way that by improving the health of the nation, at the same time you tend to improve its morals.

10,691. Would not you think that of late the general view in favour of the proper treatment of these diseases has increased very much?—I think it has very largely the last few years, more especially since the appointment of this Royal Commission, I think the opinion generally is that the public are beginning to realise that something will have to be done.

10,692. Still, you think we must count upon objections as very largely existing still?—Yes, I think you must.

10,693. Then I gather you are not in favour of what we might call preventive instruction with regard to these diseases, and that you would only wish doctors to give instruction to patients who came already suffering with the disease?—You mean instruct the young people.

10,694. Yes, young people?—Who are not in any way affected.

10,695. Yes?—I think on general sexual matters of morality so called, that instruction might be properly given to both sexes. I very much doubt whether then it is wise to go into questions of disease.

10,696. You would not give a young man at a college, or a boy at a public school, a warning as to the dangers he is likely to incur?—Generally speaking; but to go in any detail into the question of the disease, I think, is not very desirable.

10,697. I rather gather, Dr. Chalmers, you do not quite agree there; you would be in favour of rather more instruction?—(*Dr. Chalmers.*) It is a very difficult matter. While we may agree with regard to the point of instruction, it is difficult just to see how it is to be accomplished broadcast. I mean, if individual instruction can be carried out in families, I think that is probably the best way; but then many parents would not do it, as they are either unable to do it or they are unwilling to do it. If you then have a teacher who could take boys individually, I think that is the next best way. Then you are left with a considerable mass who, if they are to be taught at all, must be taught as a class. While I sometimes think it is possible, or would be possible, to lead up to a question of instruction in natural history study, the majority of children have left school before it can be at all taught to them.

10,698. What I was really thinking was, how one could warn the young men before they incurred the risk of infection what it meant?—Yes. Earlier in the afternoon I was referring to a definite statement of facts of the Physical Deterioration Committee as a possible parallel here. I do not think it should be difficult to construct simple statements of that sort which would constitute warnings.

10,699. Which you would give to everyone?—I would not hesitate. I would not hesitate to put it in the newspaper.

10,700. Then if such a statement was put out, there could be no objection to the teachers of the young people seeing that they had such a statement, and that they read it?—But then you see again you are met with the difficulty that children leave school at an age they cannot apprehend that sort of thing.

10,701. Do you think our working class children do not know all about it when they leave school?—Not only that, but I do not think they are old enough to be taught in elementary schools. If continuation classes could be utilised on the basis of natural history teaching, I think it might be approached in that way.

10,702. I only wish I could believe that the children were as ignorant as you seem to think they are when they leave elementary schools. I do not think from what one knows of elementary schools makes one feel sure of their ignorance. With regard to the treatment by panel doctors. I suppose a panel doctor could not be expected to be able to give salvarsan treatment?—(*Dr. Parkes.*) Very few, I think.

10,703. I do not mean now only on account of the skill, but on account of the expense?—I think probably the expense would not be allowed by the society.

10,704. So that we cannot look to the panel doctors being able to give proper treatment?—No, practically you cannot.

10,705. (*Mrs. Scharlieb.*) Dr. Parkes, when you add together all the children who are congenital syphilitics and the wives of men who have innocently contracted the disease from them, and when you add to them the casual people, such as doctors, nurses, and other people innocently infected, do you mean that all that together would not be more than 5 per cent.?—No. Excluding the children, I say innocent syphilis would only be in about 5 per cent. That would be the wives infected by their husbands, and there are really very few doctors, nurses, and other people who acquire syphilis innocently.

10,706. Very few, but are the wives few?—I suppose there are a considerable number; still, compared with the large amount of venereal disease there is in unmarried people of both sexes, I think the amount is proportionally little.

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10,707. (*Dr. Mott.*) Dr. Parkes, the people attending these approved institutions for treatment, you say they might come from one town to another?—Yes.

10,708. Supposing they went to several towns, it would be highly desirable that they had some card which they could take with them showing what treatment they had, or else they might get two doses of salvarsan in the same week?—Yes, I think something of that kind should be given—a card, or something of that kind, which they could produce; but I do not think that would occur very often. It would only be when a person left his residence and went somewhere else; he would go for treatment elsewhere.

10,709. Then do not you think this card would also be very useful if it gave directions to them as to their conduct in the future?—As to their conduct while in an infective condition?

10,710. Yes?—Yes, I think that would be very useful.

10,711. Not only that, but to give them directions as regards the probability of cure if they strictly attended to the directions they had on that card? I think that is very important myself?—That was my idea, that this statement prepared by the Local Government Board should be given to all these patients with the treatment.

10,712. But that would not convey to another institution what treatment they had already had?—No.

10,713. But this card would, you see?—Yes; I had not thought of that. It is very important they should have a card, a sort of identification and registration of what had already taken place.

10,714. And another very useful thing would be, they would not be registered twice in that way?—Yes.

10,715. You see you would get wrong statistics if you do not have some indication that they have been to another institution before?—Yes.

10,716. Then Mrs. Creighton asked a very pertinent question as to how you would answer the local authorities who objected on moral grounds to the treatment of venereal disease. You did not reply to that, the enormous financial advantage it would be. You did not give that as a reason why they should treat these people even with an expensive drug like salvarsan?—The financial advantage to whom?

10,717. To the ratepayers?—There would be a saving in the sickness rate, and so on.

10,718. If you consider that 600,000*l.* was spent last year for the maintenance of lunatics in London, and that 15 per cent. of the male admissions are general paralytics, and we now believe that every case of general paralysis is the result of syphilis, it would appeal to the local authorities if you could tell them it is highly probable that that amount of insanity would be very greatly diminished?—Yes. That would be one form of appeal. You must remember that a good many of these local councillors are not very highly educated people. It takes a good deal to persuade them of these new ideas and new things.

10,719. I will give you an instance of that. Three or four councillors of an East end parish came to Claybury, and I showed them the spirochæte under my microscope in a case of general paralysis, and explained to them that was the cause of the disease, and that it could be prevented if they would only use this drug early. It had the effect of the medical officer getting the salvarsan supplied for the treatment. So that they are open to reason?—Yes, they are open to reason.

10,720. And I think that is a very important element to be considered?—Yes.

(*Mrs. Scharlieb.*) They are ignorant people, but if you take the trouble to explain matters to them they will very often listen to you.

10,721. (*Canon Horsley.*) The difficulty is they cannot see the use of present expenditure for future gain. All they think about is the present expenditure. It is difficult to teach them what happens 10 years hence?—Yes; it is a very short sighted view they take.

10,722. (*Dr. Mott.*) Then with regard to the quacks, I must say I entirely agree with Sir Almeric FitzRoy, who thought it would be desirable to stop quacks treating this disease, for this reason; we have had very conclusive evidence of the necessity of treating

syphilis in the primary stage, because unless it is treated in the primary stage infection of the whole body takes place, and the success of the treatment depends entirely on that. If a man wastes time by going to a quack he will then lose the opportunity of being cured?—Yes.

10,723. I do not see any way of stopping that unless we do take some measures to prevent quacks advertising?—Prevent them advertising.

10,724. That would be the first step. How does a man go to a quack? In a great many instances he goes there because he sees, as you have said, advertisements in a paper of quick cure without operation, or something of that sort. He would regard the intravenous injection of salvarsan as an operation?—Yes, he would.

10,725. And yet it is by far the most reliable method of preventing after effects of the disease?—I think both Dr. Chalmers and I agreed that it would be very desirable to prevent the practice of quacks; but the difficulty is in carrying it out, and there is a danger also of creating a feeling that you are going too far; that you are trying to benefit the medical profession by doing away with unqualified practitioners.

10,726. Yes. But we have to consider it is in the interests of the State to prevent a man going about with an infectious disease. We know very well that if you inject the salvarsan, after 48 hours he is less likely to communicate the disease?—My own opinion is it would be better not to take any steps against quacks at present, but to trust to the treatment that is provided. If the public find it can be carried out without inconvenience to themselves, with secrecy, and with a satisfactory result, I think it will do more to do away with the quacks than any penal system dealing with them.

10,727. Do you think it would be feasible if a patient who was treated by a quack, afterwards went to a doctor suffering with a very severe nervous disease, to bring an action against the quack?—They could do so; but they never will do so, of course.

10,728. You do not know?—They would not undergo the notoriety of bringing an action. Not one person in a thousand will bring an action of that sort if he had a position to lose.

10,729. He might not have a position to lose. I admit what you say. Then it is all the more desirable to prevent the quack by penal measures?—Yes, if you can. If you can devise a system of stopping the quacks without creating a feeling in the public mind that you are preventing poor people getting treatment, and that sort of thing, I think we should do it; but there are very great difficulties, I think.

10,730. You would think it desirable to adopt legal measures to prevent advertising?—Yes, that might be done; but then you are up against the great newspaper interests, which are enormously strong, as you know.

10,731. Quite. That would even be greater?—Yes.

10,732. (*Canon Horsley.*) In this suggestion here that all the registration of births, deaths, &c., should go in future to the medical officer of health, the word " &c." covers the unimportant fact of marriage, I suppose?—Yes; I suppose they would all have to go together.

10,733. Obviously, it would not be well to keep on a whole staff of registrars merely for marriage?—Yes.

10,734. Because marriage numerically is the minor point compared with the other?—Yes.

10,735. But it is not quite apparent what the medical officer of health has to do with marriage, unless everybody is going to be Wassermanned before that?—I think rather the idea is the medical officer of health should be a sort of superintending registrar. He would not be the actual official receiving the information and entering people in a book.

10,736. He has a great deal to do with births and deaths, but at present has nothing to do with marriage?—No; but deaths, at any rate, would all be referred to him to see if they were in proper order.

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10,737. Then, in No. 2, here, you say: "This examination would throw light on the nature of the disease," Ought not you to insert the words "existence or nature," because sometimes it is a question whether the disease exists at all, is it not? The local authority may have a doubt whether the man has disease or not; but if you send a swab from the throat you find out whether he has diphtheria. "Existence or nature," it ought to be?—Yes, I think that would be important.

10,738. Then, in No. 16, in this more extended *précis*, you say: "It would appear desirable that there should be prepared under the direction of the Local Government Board, information conveyed in popular terms on the dangers to health of venereal diseases." I suggest there that that ought to come third, and you have left out, either by accident or design, the first thing, I think there ought to be; information as to the non-necessity of illicit sexual relations on the grounds of health; and, secondly, the great probability of disease following those relations; and, thirdly, the dangers to health that come from it?—Yes, that would be more logical.

10,739. But you have not those two at all?—No.

10,740. A great many people seem apparently to forget first of all to say, strict chastity is perfectly possible and perfectly conducive to health?—Yes.

10,741. Then you go on from that afterwards and say: "But if you cannot do that, you must know what you are going in for"?—Yes.

10,742. That is the line one takes with lads and young men; and I am rather jealous that in any printed document those things should come in?—Yes. That is the same line taken in the army. I think you have had evidence of that already.

10,743. No; it did not definitely enough begin by saying you need not do it?—I know from my experience on the advisory board for the army medical services that that is one of the things they are teaching the young soldier now.

10,744. Now, but not until recently?—That chastity is perfectly possible and healthy for a young man.

10,745. There is one other matter, a geographical or local thing. You suggest some of the counties would not have large enough towns for one of these clinical places or hospitals. Surely every county has a town big enough for that, except perhaps Rutlandshire?—No. Take Wiltshire or Somersetshire.

(*Canon Horsley.*) Wiltshire has a large camp.

(*Mr. Lane.*) There is Swindon.

(*Canon Horsley.*) Swindon has enormous railway works, and there is a large camp at Tidsworth and so forth. It is a large military centre now.

(*Dr. Mott.*) And Salisbury Plain.

(*Canon Horsley.*) Yes; and take such a county as Essex. Both Colchester and Chelmsford are garrison towns. I should have thought, possibly except Rutlandshire and Huntingdonshire, you would have towns big enough to have a general hospital.

(*Sir Almeric FitzRoy.*) Westmorland.

10,746. (*Canon Horsley.*) There are large places in Cumberland; Whitehaven, for example?—It is very desirable to send these patients to really expert men, who are seeing a great number of cases every week.

10,747. On the other hand, it is also desirable to have plenty of these places dotted all over England. People would not go a long railway journey to be treated?—Of course you must consult their convenience of travelling.

(*Sir Almeric FitzRoy.*) In Buckinghamshire there is no large place either.

10,748. (*Canon Horsley.*) It seems to me the more you have of these, the more patients you will have. People will go to the next town?—Of course a great many people will find it easier to come up to London if within 100 miles, than to go to some neighbouring town very often.

10,749. (*Dr. Mott.*) But really you think it would be more efficiently treated—the diagnosis would be more efficient?—Yes, and the treatment more efficient. The man who only sees one or two cases of syphilis a week is not in a position to carry on the treatment so effectively as one who has 50 or 60 a week.

10,750. (*Canon Horsley.*) Just one other thing with regard to local treatment. You suggest that any borough that had this local centre should treat people from that borough or any other?—Yes.

10,751. There I think a local difficulty would come in. They would say: "Why should we be treating all the prostitutes for the next borough when we have not any of our own." I am quite sure the argument would be used?—You see if the rates were not burdened in this way—

10,752. If it were all done by the Government?—Yes; if it were done by a national grant, no objection would be raised.

10,753. Then on the other hand, if it was not purely a matter of national expense, that argument would come in at once?—Yes, that is what I feel. There would be these local feelings raised about it, and they would become in some small places exceedingly acute, and give rise to undue unpleasantness and discussion, which should be avoided.

10,754. You do not exactly mention that, but that would be a very strong argument for the whole cost being put on the central authority?—Yes, I think so.

10,755. (*Rev. J. Scott-Liddett.*) Dr. Parkes, you will bear with me if I ask you a few questions which have already been covered, because I want to clear up a few points that have already been touched upon. I think we may assume, any prejudice against the adequate treatment of these diseases, if needs be, by local authorities is on the decline?—Yes, I should think it is declining.

10,756. And you expect when the evidence which is being given to us is made public, and when public discussion takes place, it will decline very much more rapidly?—Yes, one would hope so.

10,757. So that it will be seen that we are here trying to meet a great national need?—Yes.

10,758. And might I take it from you, that the dealing with this disease is more national in its character than perhaps almost any other disease, on this ground: that there exist in our great cities and towns great foci for contracting these diseases which attract to them people from all the surrounding country?—Yes, that is so.

10,759. And therefore, any charge dealing with this matter should fairly be a national and not a local charge?—Yes, that is what I think.

10,760. And not only in equity should it be a national charge, but all these dislikes of local authorities to treat people outside their borough boundaries would be met by its being so?—Yes.

10,761. At the same time, would you, or would you not, concede that local management and oversight is very important if the institutions are to be effectively controlled?—Yes, I think it is very important to enlist the local management if you can. It must be in the nature of things more effective than the central inspectors system, which cannot be so thorough and so constant as the local management. The local management is a very great thing, I think—the local supervision as well as the central.

10,762. I take it from your later answers that instead of grants in aid, which I understand, is advocated from your proof, you would now make the whole charge a burden on the Exchequer?—I am appearing for this society, and also for myself. The society said a grant in aid; but my own view has always been it should be a national system and a national grant.

10,763. Have you thought out the difficulty of combining complete maintenance by the State with power of local control?—No, I do not see why the local control should not take place. The local body would be acting, to a certain extent, as a delegate of the Government or Nation in this matter, and the two might very well be combined. For instance, I could not think of any conflict of opinion between Dr. Chalmers, as representing Glasgow, and the inspector of the Local Government Board who came down to see the system which is being pursued there both for treatment and diagnosis.

10,764. I take it that the scheme for dealing adequately with these diseases would have to be on a

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national basis; that is to say, some local authorities would need very large provision, and some local authorities would need no provision at all?—Do you mean financial?

10,765. No, the provision of institutions?—Yes.

10,766. It has been pointed out there are certain counties with sparse populations, which, if they are to be treated at all, would perhaps go to another county to some large centre?—Yes. Some counties would escape having anything to do with it at all, I should think.

10,767. So that, in this sense, we have to combine local control with the total expense being borne by the Imperial Exchequer, and also with the system of arrangements not being on a local basis at all, but on a wide scheme for the country, as a whole?—Yes, I think it could be organised and administered in that way without difficulty.

10,768. But it would be rather a new thing in the relations between the central and the local authorities?—Yes. I think there would be an element of novelty about it.

10,769. At the same time you attach great importance to the local authority coming in in order to deal effectively with local things?—If they wish to. If they do not wish to, then leave them out. They will in time. No doubt those who refuse at first and find others coming in and taking part in the management would come in. I doubt whether many would refuse to come in.

10,770. Do you think in providing a national system you ought to allow the local authorities to refuse to come in?—I think so. I would not make it compulsory to those who conscientiously believe they ought to have nothing to do with venereal diseases, either the treatment, or the diagnosis; I think there are some who take that view.

10,771. But, from an administrative point of view, could you possibly have two systems side by side, one a direct management say by the Local Government Board and the other management by local authorities?—In different places I think you might.

10,772. Would not there be great conflict of all kinds arising?—I do not think so. There would not be very much necessity really for supervision if proper officers are appointed at the hospitals.

10,773. Do you really think that if the burden were a national burden, and if this inquiry has the educative effect we hope there would be any local authorities reluctant to take their part?—My knowledge of local authorities leads me to believe that there would be, and that it will take years to educate them up to that point. You must remember that some parts of the country are very behindhand in many ways; they are not in touch with this question at all.

10,774. I think you are anxious that the existing hospitals should play their full part in a national system?—Yes, I think they ought to be allowed to certainly, and given an opportunity of doing so in the first place.

10,775. Have you thought of the relations which either the local authorities, who manage, or the national authorities, who pay, should take up to the hospitals that do this work?—The relation between the local authorities?

10,776. Or the Government department and these hospitals?—The relations between them?

10,777. Yes?—Do you mean the financial relations?

10,778. On your view, in this general scheme, the hospitals which have hitherto been on a purely voluntary basis are to be Government centres for dealing with these diseases. Have you any suggestion to make as to the relation in which the hospitals should stand, either to the local authority that manages the work, or to the Government department that supervises and pays for it? Would you leave the hospitals as free from interference as they are at the present time?—I think if there is a grant, the hospitals ought to comply with the regulations and rules made by the Local Government Board or the local authorities, as to treatment, and so on. Supposing,

for instance, the requirement was there should be two days a week in the evening for seeing these patients, and the hospital said "No, we will not provide two days a week, we will only provide one," I think it ought to be open to the people who provide the money to say, "We will make arrangements with some other institution."

10,779. But subject, I take it, to their fulfilling the requirements laid upon them by the Government or the local authority, you would leave their autonomy quite unimpaired?—Yes.

10,780. One more question. In the case of London, I presume the only economic way of providing for the needs of the whole of the population would be through the central authority, the London County Council?—Yes; the London County Council is evidently the body which one would look to; but, having regard to its multifarious duties, and the time which elapses before it gets to work, I do not think it is the best body.

10,781. Is that your experience?—That is my experience.

10,782. (*Mrs. Burgwin*.) I think you state that the ante-natal fatality from syphilis is very considerable?—(*Dr. Chalmers*.) I think there is reason for believing that it is. That is dealt with in the supplementary memorandum which I have sent in.

10,783. I do not see how you would meet the difficulty. Have you any suggestions to offer how you would meet the difficulty of treating those people?—First of all I think we want to establish the fact that it is syphilis which is the cause of the number of miscarriages. It is only on a suggestion from a very limited inquiry at the moment; but I think there is an increasing amount of evidence that it is so.

10,784. In Glasgow, I think we have been told there are a great many young girls who are diseased. Could you tell us whether you think the girls come into the city of Glasgow from the country districts to hide their shame?—Come in to be confined?

10,785. Yes?—I ought to be able to know; but I do not at the moment remember the number of births we send out, I mean births in maternity hospitals and lying-in homes, but there will be a certain number come.

10,786. You think the girls from the country will come in?—Yes, from outside of Glasgow.

10,787. Do you think that Glasgow would be prepared to treat the people infected in Edinburgh if they chose to come from Edinburgh, so that their condition should not be known?—I think that was the basis of the recommendation of the Society of Medical Officers on which they suggested a Government grant in aid; that any authority should treat, as it does other infectious diseases at the moment, every case in its area irrespective of its source; that it should treat venereal diseases, but in order to equalise the cost as it were, it should be subsidised.

10,788. You think you would be prepared in your own city to say everyone coming in should be treated, irrespective of where they lived, or what place they belonged to?—At the present time in consumption we accept responsibility if the patient comes to live in Glasgow.

10,789. Irrespective of residence?—Irrespective of original place of residence. I am assuming they come into Glasgow.

10,790. (*Dr. Newsholme*.) Dr. Chalmers, you represent the Society of Medical Officers of Health which, I believe, has about 1,000 members, or thereabouts?—Yes, I think that is probably right.

10,791. And those members are the skilled advisers in matters of public health of about three-fourths of the total population of Great Britain?—Yes, I think you are perfectly right.

10,792. So that this memorandum of the society speaks on behalf of the majority of the population of Great Britain from the point of view of their public health officers?—Yes.

10,793. And the memorandum very definitely urges the importance of gratuitous provision of laboratories for the diagnosis of venereal diseases?—Yes; free

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diagnosis and free treatment were the two points that I think we were quite unanimous about.

10,794. That is strongly urged as an essential part of the campaign against these diseases?—I think so.

10,795. It also urges the giving of local subsidies for the treatment of these diseases?—To meet this point, the difficulty one would experience if you refused to treat anyone save in his own area.

10,796. Was there any consensus of opinion as to what proportion that subsidy ought to be to the total expenditure?—I think we probably varied from 50 to 75 per cent.

10,797. In the discussion?—Yes; Dr. Parkes will be able to correct me.

10,798. You know what is known as the Hobhouse Grant in regard to tuberculosis?—I know the suggested equivalent. It is one half.

10,799. Yes, 50 per cent. Would in your opinion 50 per cent. of the expense of treating venereal diseases in Glasgow suffice to induce the Glasgow authority to undertake an all round good scheme?—I imagine it would make any authority consider how it might be done; but the difficulty one has in definitely stating a proportion arises from the ignorance one might say that prevails with regard to the amount to be dealt with.

10,800. Supposing the amount were increased to 75 per cent., would that make most local authorities in your opinion willing to start schemes?—I think it would.

10,801. But would there not be a very great administrative advantage in keeping some proportion of the expense local in view of the fact that the local authorities are the best people to administer the preventive measures?—You see we left a fourth over to be borne by the local authority.

10,802. I ask you, would not the leaving over of that fourth be advantageous in order to make the local authorities greatly interested in the matter?—I agree; and that was the reason we said three-fourths and not four fourths.

10,803. Who said three-fourths?—I mean the discussion at the society.

10,804. You have just said some of them said 25, and others 75?—No, 50 to 75 per cent., I mean that there should be a balance of the cost borne locally; we were quite agreed about that.

10,805. You do not quite agree with Dr. Parkes, then, that the whole of the local expense of treating syphilis should be borne by the Treasury?—I rather differ from that view altogether. I mean, my thinking in the matter is entirely on the lines of local organisation, local handling, local treatment, locally dealing with it.

10,806. If otherwise, it would be completely unique, would it not, for local authorities to have the charge of the treatment and diagnosis of these diseases, and yet to have none of the expense on their shoulders?—It would be quite an anomaly, I think.

10,807. There is no other instance, as far as you know?—There is no parallel I know of.

10,808. The question has arisen as to whether central inspection would make such an arrangement phenomenal. Is it your opinion that the Local Government Board of Scotland, if the Glasgow people were inclined to extravagance would be able to prevent an extravagant use of 100 per cent. of the subsidy funds?—I very much doubt whether central supervision could prevent careless use of a subsidy. It is an extremely difficult thing. You would require to be as familiar with the administration of the grant as those who were disbursing it.

10,809. Dr. Parkes was suggesting that a *per capita* arrangement for payment could be arranged. Would you be inclined to agree with that?—That is, a certain sum for every patient treated?

10,810. Quite. Is there not an alternative arrangement now in force with regard to tuberculosis: that the municipality of Glasgow presents its half-yearly or yearly account to the Scotch Local Government Board for the expense of treating tuberculosis patients, that account is audited by the Scotch Local Government Board, and half the cost is paid through the Treasury funds? Is not that a much easier way of getting at

it?—That is what I had in my mind when I suggested 50 or 75 per cent. should be paid from a Government grant in aid.

10,811. Do you think Glasgow is willing to undertake one-fourth of the cost of the total treatment of anybody who cared to come to Glasgow hospitals if it got three-fourths?—Of course I am expressing an opinion entirely of my own, and I have not at all consulted the Committee on the question of finance; but I think it quite a reasonable proposition that they would.

10,812. Would it be possible to arrange a sliding scale so that cities like London and Glasgow, which receive a large number of patients from outside, could get a larger percentage than other areas where only local patients were treated?—We proceed on the assumption that local areas would not, as a rule, treat many or a large proportion of their own patients.

10,813. Going to another point, Dr. Parkes was suggesting that the Local Government Board, either in Scotland or England, should take on the responsibility for the local treatment of these diseases when the local authority failed to provide a satisfactory scheme; do you agree with that?—No.

10,814. What would be your suggestion, instead?—You have the principle of the Public Health Act. If a local authority neglects its work, there are means whereby it can be compelled to undertake it.

10,815. Do you personally think the Local Government Board is likely from its central offices to be able to organise the details of a satisfactory scheme without local help?—No, I do not think so. I had not thought of the thing at all on that line; because if you introduce for the purposes of treating a particular disease a central authority, then you get right across the whole principle of local administration.

10,816. Then returning to the memorandum of your society, you wish authorities to be empowered to provide for diagnosis and treatment. Would you not now be prepared to go a step further and desire that it should be made obligatory on local authorities to do this? I am now asking for your personal opinion?—Again I fall back on the principle of the Public Health Act, which leaves a considerable amount to local option.

10,817. We will imagine a reactionary city council were elected in Glasgow, a cheeseparing council, determined to save even this paltry 25 per cent. of the cost of treating syphilis, do you think it is satisfactory that treatment of venereal diseases in Glasgow should intermit until that council was driven out again?—So far as the past history of Glasgow is concerned—

10,818. It would not arise?—I can hardly contemplate it; but, I think, even then you have the powers of the Public Health Act at the initiation of the Local Government Board. If they fail to do certain things, or if they do not choose to do them, the Board can decide easily.

10,819. Would not you welcome the Scotch Local Government Board making it obligatory on the city of Glasgow to treat this disease under conditions laid down by the Scotch Local Government Board?—No. First of all, I am not clear legally, because it is entirely a legal question, as to whether what we are doing now is covered by the Public Health Act. As I say, I raised the question with the clerk and he did not answer it. He just allowed it to pass.

10,820. Have you anything which corresponds under the Scotch Act to section 130 of the Public Health Act?—Yes.

10,821. It can be done legally?—Yes, it can be done legally. An order could be issued?—Yes.

10,822. So that I will come back to my point. An order could be issued?—Yes.

10,823. Would you not as the Public Health Officer for the city of Glasgow welcome such an order, making it obligatory on the city of Glasgow to treat these diseases satisfactorily and completely, subject, we will say, to a 75 per cent. subsidy?—I do not suppose I would be disposed to go further than the Public Health Act in the matter.

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10,824. I put it to you that these regulations we have been talking about are made under the Public Health Act, and under the Public Health Act the Scottish Local Government Board, I believe, like the English Board, is empowered to make regulations making it obligatory on Glasgow to do this. We may both be wrong; but assuming it to be possible, would you not welcome something which will prevent any local authority in Scotland refusing to treat these diseases, having the advantage of 75 per cent. subsidy?—I think at first it should be an optional thing. The legal position of the local authorities should be made quite definite; but it should be left to a rural authority to decide whether it is necessary or not within its own area.

10,825. Then I will come back to the other point. If you make it optional, then Dr. Parkes tells us we have some authorities, who, for moral or other reasons will not carry out the treatment in those areas, will have disease spreading and from them it will infect other areas. How will you meet that?—

10,826. That is hypothetical, is it not?—If you find that to be the case, the order could be altered or the other sections of the Act put into operation.

10,827. But in actual fact, I think you will agree with me that if, say, a 75 per cent. subsidy were given, very few authorities would keep outside?—I think very few.

10,828. They would all be willing to treat?—Yes. I think one must have some regard to the uncertainty of the volume of these diseases at present, not only in primary stages, but in their later effects. It might mean transferring a good deal of the work of the Poor Law Asylums at the present time. Gynaecological wards of the general hospitals might be transferred for another reason.

10,829. Another question which was raised was that of a central registry of patients. Do you yourself see any advantage in such a central registry without names?—None. The numbers will be sufficient.

10,830. Do you see any means of checking entries in such a registry which will not allow any number of duplications and transference of specimens which have come, on which the register was based? You have here a statement as to the number of specimens you examined the last six months?—Yes.

10,831. Can you tell me how many of those were duplicates?—I believe none of those were duplicates; but then these get increased as the months go on, and it is very likely we will get duplicates.

10,832. Do you think you could depend on the practitioner to put the right initials or right number in such a way that the duplication might be avoided?—I do not think there will be any difficulty with the practitioner and the same with the patient; but the difficulty will come when the patient changes his doctor.

10,833. Arising out of that, is it not likely that if the existence of such a registry as that were known, it would inhibit patients from going for treatment by qualified doctors?—I think it would. I mean, I am wholly against the idea of a central registry.

10,834. That would very likely drive them to quacks?—I think that is quite likely. It savours too much of what I call a black list.

10,835. Then turning to the question of the registration of deaths, the Society of Medical Officers of Health would like to make the Medical Officer of Health responsible for oversight of registration?—We are particularly interested at the moment in the question of the registration of stillbirths, and more particularly the cause of stillbirths.

10,836. I will come to that in a moment; but apart from stillbirths, I gather you would get more accurate certificates of deaths from doctors if it were sent to the M.O.H. direct than otherwise?—Yes.

10,837. That is a very old proposition. Dr. Farr in the "Forties" made the same proposition?—That is so.

10,838. And it remains as desirable now as ever it was?—Yes.

10,839. But I do understand your society proposes a sealed certificate not to be accessible to the parents? Would you afford access of the relatives to this

information? That point was not elicited, I think?—No, I do not think it is suggested as an alternative scheme to that. The two things were not compared. One or other might do; but this is our way of looking at it.

10,840. But would you be likely as Superintendent Registrar to get better information than the present registrar gets, unless the surviving relatives or the insurance society were prevented having access to the information you receive?—You would have the advantage of getting added information at once, I mean, within a week of the registration you could have your enquiry completed, when the thing is fresh in mind.

10,841. Is not one of the main difficulties in getting information that the doctor would not put down alcoholism or syphilis, or anything which in any way reflects on the patient?—Yes, the friends would see it.

10,842. But under your alternative scheme, the friend would still see it?—I did not think that was a necessary part of it.

10,843. That is what I want to elicit. Is not your scheme imperfect, because it is not supplemented by the condition that the relatives should have no access to the certificates?—I think we would all accept that.

10,844. Dr. Parkes, would you accept that?—(Dr. Parkes.) Yes.

10,845. Unless your scheme is further supplemented by the condition the relatives should have no access to the certificate of the causes of death, it would fail?—I think the society would be unanimously in favour of that.

10,846-7. With regard to your examination of specimens in Glasgow, Dr. Chalmers, you have examined nearly 400 specimens in six months?

(Chairman.) We will take that separately.

(Dr. Newsholme.) I was only going to say that I had the information before this special memorandum came in. Your population is about a million?—Yes.

10,848. We had evidence the other day from Glasgow that over 20 per cent. of the juvenile population attending certain general hospitals for general diseases had a positive Wassermann?—That does not correspond with the experience in our infectious hospitals.

10,849. What is the percentage in the infectious hospitals?—It is 8 per cent.

10,850. We will take 8 per cent. Your 400 specimens represent obviously only the first six months' work, and in respect of that work you are ahead of nearly every other part of the country, but it represents a minute percentage of the total number of cases of syphilis in the city of Glasgow?—I think you are quite right; but remember we undertook Wassermanns not to verify diagnosis, but in order to clear up the minds of the practitioner as to obscure symptoms. You will see our circular there which I sent out. That statement was made quite definitely.

10,851. That is so; I accept that. But I was very much interested in seeing that you pay the practitioner for his trouble in sending the specimen of blood which is needed to help him to properly treat his patient?—Yes, that is so.

10,852. You subsidise him for doing the work which, whether subsidised or not, he ought to do?—We pay him for two things. First of all the puncture of a vein is after all a thing which must be done with a good deal of care, and then, secondly, we ask him to supply a very considerable amount of information.

10,853. Yes; you ask for information in addition?—You will find a schedule attached.

10,854. Have you been able to make any use of that schedule of information; do you think it will come in useful?—I think so. There is in that précis an analysis of the symptoms.

10,855. With regard to stillbirths, you have about 4 per cent. or 5 per cent. of stillbirths in Glasgow of the total births, do not you?—You are perfectly right; it is rather less than 4, but I do not think we get them all.

10,856. Have you taken any administrative action with regard to those stillbirths as to finding out the cause?—Two of my assistants are working at it just now. Two lady doctors, who look after infantile

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Dr. L. PARKES and Dr. A. K. CHALMERS.

[Continued.]

mortality, have been at it for months; but there is nothing I can tell you yet.

10,857. How many Wassermanns have you got in connection with that investigation to discover whether the mothers are syphilitic?—We are not doing that at all.

10,858. You have not got as far as that?—No.

10,859. So that you have not yet got to the point when you can apply your information and advise those mothers to be treated for syphilis?—That is quite true.

10,860. Dr. Parkes, may I ask you whether anything has been done on that point in Chelsea?—(Dr. Parkes.) No.

10,861. Does either of you know whether that line of immediately practicable public health investigation has been carried out in any part of England or Scotland?—(Dr. Chalmers.) Not with regard to syphilis, as far as I know, but as regards ophthalmia neonatorum we have been trying it with quite uncertain results. I mean some mothers if taken individually will have treatment, and then suddenly they will refuse it. If one comes in who objects they all object, so it is by no means established as a regular custom.

10,862. You agree, I think, that that opens out tremendous possibilities of future public health work?—Obviously.

10,863. I should like to ask one point of detail on that. Supposing the mother of a stillborn infant were found to have a positive Wassermann, have you formed any idea as to how you would proceed to follow that

up?—We would recommend her to go to a doctor for treatment, and we would tell her doctor, if she had one, this thing we discovered with regard to her. That is what we do at present.

10,864. But I take it we may accept it that the Society of the Medical Officers of Health are entirely in favour of the subsidisation to an unstated proportion of free diagnosis and free treatment of venereal diseases?—Yes, that is so.

10,865. (Chairman.) Dr. Chalmers, assuming that the results of the inquiries of this Commission led to the disclosure of a much greater prevalence, a much greater danger to the community than has hitherto been recognised of these diseases, would that have the effect of making local bodies, such as yourself, most anxious that something should be done?—I quite think that the Glasgow Corporation would take action at once.

10,866. Do you think that the lay authorities, not yourselves, have any idea of the evils which are arising from these diseases in a town like Glasgow?—Not in a definite way.

10,867. You think if it were brought home to them there would be keenness, at all events, to do something whatever the lines of action might take?—I mentioned the illustration of the readiness with which they took over the treatment of young children from the Lock Hospital.

(Chairman.) Then we will postpone your further examination.

The witness withdrew.

TWENTY-EIGHTH DAY.

Monday, 23rd March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(Chairman).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (Secretary).

Sir DONALD MACALISTER, K.C.B., M.D., called and examined.

10,868. (Chairman.) You are Principal and Vice-Chancellor of Glasgow University, and President of the General Medical Council?—I am.

10,869. Will you first tell us how the General Medical Council is composed?—The General Medical Council is composed of a representative from every University in the United Kingdom, and from every medical corporation, meaning thereby the Royal Colleges of Physicians and Surgeons and the Apothecaries' Halls, these bodies having power to grant medical qualifications. It contains also six representatives directly elected by the votes of the registered medical practitioners of the three divisions of the Kingdom, and five members appointed directly by the Crown; that is to say, about 35 or 36 members.

10,870. Does this Medical Act of 1858 to which you refer apply to the whole of the United Kingdom, including Ireland?—Yes, to the whole of the United Kingdom.

10,871. Therefore, the whole of the practitioners of Ireland, Scotland, England and Wales, come under the supervision to some extent of the Medical Council?—Yes, and all who are on the register, whether they

are resident in these three parts of the Empire or not, come under it. We have a number of registered practitioners in many parts of the Empire, and, so far as they are registered, they are under the jurisdiction of the Medical Council.

10,872. Does your register run throughout the Empire?—Practically, except at present in certain of the provinces of Canada. Each state, province, or other separate possession of the Empire may have applied to it Part 2 of the Medical Act of 1886, and then reciprocity is established between this country and that part of the Empire. Every part of the Empire, except certain provinces in Canada, has come under that part of the Act. In that case its qualifications are registered in this country, and our qualifications admit to practice in that part of the Empire.

10,873. Will you tell us generally what powers are conferred upon the Council by section 18?—Under section 18 the general power is conferred upon us of requiring from all the bodies that grant medical qualifications, complete information with regard to the details of the course of study they prescribe, and the examinations they hold for the purpose of conferring

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[Continued.]

qualifications. We can also ask questions about the age at which students are admitted to the various stages of the medical curriculum, and generally as to any matter which may be regarded as requisite for obtaining these qualifications that may concern the particular body in question.

10,874. And, speaking generally, section 18 empowers the Council to obtain any information it chooses, and to supervise in a general way the carrying out of examinations?—Yes. For the further purpose of ascertaining what the character of the examination is, we have the power to send any member of the Council, or any person deputed by the Council, to attend and be present at the examination, and come back to report to us what has taken place. That is called technically with us, "visitation of the examination." We have further powers under a later Act.

10,875. Then that power gives you not only control, but complete supervision over the character of the examination held at any centre?—We can exercise our power of visitation, ascertain what happens, and pass our comments upon the examination.

10,876. Now, coming to sections 20 and 21, will you please tell us about them?—Supposing we find by the inquiries we have addressed to a particular body that its course of study and examinations does not seem to us sufficient, or suppose we ascertain from the reports of our visitors that the examination is not properly conducted; if we are of opinion that the defects so disclosed are such as to impair the guarantee which we require that the persons who obtain the qualifications of the body possess the requisite knowledge and skill for the efficient practice of their profession, we can come to a finding to that effect, report that finding to the Privy Council, and then the Privy Council can communicate with the body, ascertain what it has to say in defence as it were, and, if it is not satisfied, it can say that the qualification which is conferred under those conditions shall no longer be recognised as admitting to the register of the Medical Council.

(*Sir Kenelm Digby.*) Would it not be useful if we could have the actual context of the Act appended to the report? I do not say it is not useful to have it in this form; but it would be very convenient to have it in the other way.

(*Chairman.*) I agree.

10,877. Then those two sections give the Council power, which they share with the Privy Council, and I suppose the Privy Council in such a matter as that would generally act upon the advice of the General Medical Council?—I presume so.

10,878. Do cases arise in which you exercise your powers under those sections?—We have not hitherto had to report insufficiency of any body now in existence.

10,879. (*Sir Almeric FitzRoy.*) May I ask was it not the case that you made some representations about examinations in the University of Edinburgh within living memory—at least within my memory?—I was just going to explain that. If I may distinguish, because there is a distinction to be made—with regard to no examining body now in existence have we had to report finally that its examinations were insufficient in the opinion of the Medical Council. With regard to one body now extinct, we did report that its examinations in certain respects were insufficient; but the Board was dissolved, and therefore no further proceedings were required by the Privy Council. In the case to which reference has been made, we learned in the case of three universities that the examinations in surgery were not all that we could desire, and it appeared from the explanations given by the bodies that there was perhaps some temporary reason for this. What we did was to re-inspect them within a short period, perhaps a year or something of that kind, and naturally at that re-inspection everything was in perfect order, and therefore we were not called on to report them to the Privy Council. Sir Almeric is quite right in the case referred to. But no final step of the kind I have referred to has had to be taken with regard to any existing body.

10,880. (*Chairman.*) Then in the extreme case of recalcitrancy of any teaching body, the Act gives you

power, if the Privy Council agrees, "to order that any " qualification granted by such college or body after " such time as may be mentioned in the Order, shall " not confer any right to be registered under this Act." That is really the penal clause, as it were?—Yes. But I should correct that if I may, my Lord, and say the Privy Council may so order with respect to any examining body. There are teaching bodies which are not examining bodies.

10,881. Now, turning to the Medical Act of 1886, what provisions does that make which affect your Council?—That Act strengthened the requirements as to medical examination and education very considerably, and conferred fresh powers upon the Council. Up to 1886 a man might obtain a qualification from a body capable only of giving a licence in medicine, or he might obtain a licence in surgery only, or he might obtain either of these, with a licence in midwifery, and he could register these licences separately. The old Act provided that, if he registered a licence in medicine, he could only practice medicine, and if he registered a licence in surgery he could only practise surgery, and so on. The Act of 1886 said that no person could be registered at all unless he possessed qualifications in medicine, surgery, and midwifery, and unless he passed a qualifying examination in which all of these three branches are satisfactorily represented. That unified the register; and now everybody who is on the register under the Act of 1886, has passed a sufficient examination in medicine, surgery, and midwifery. The Act also increased the powers of the Council in this; that instead of the visitation to which I referred, that is to say the visitation of the examinations by members of the Council, or persons deputed by them, it laid down a regular procedure by which we could appoint inspectors, who might go down at regular intervals or otherwise as instructed, and make formal reports upon the procedure at the final examinations of all the various bodies. That power of inspection was to result in reports from the inspectors, which were to be laid before the bodies for their comments, and which were then to be discussed by the Council, passed upon by the Council as to the sufficiency or insufficiency of the examination inspected, and laid before the Privy Council, whether sufficient or insufficient. So that the Privy Council was then placed in possession of full information with regard to all the examinations in the country, and we were not restricted only to reporting when we thought a body was insufficient.

10,882. Then the effect of sections 2 and 3 was for the first time to prescribe certain subjects which must be passed to qualify a practitioner, and secondly to give the Council considerably greater power in studying and inspecting the course of examinations at the various centres?—That is so.

10,883. Then section 4. How did that affect your operations?—In section 4 the guarantees, if I may so call them, for the possession of an adequate knowledge, were defined more thoroughly than they had been in the Act of 1858. We were told that if it should appear to us that "the standard of proficiency in medicine, " surgery, and midwifery, or in any of those subjects or " any branch thereof, required from candidates at the " qualifying examinations held by any of the bodies for " the time being holding such examinations is insuffi- " cient"—"any branch thereof" you notice—"the " General Council shall make a representation to that " effect to the Privy Council"; and the Privy Council could then in similar manner to what was prescribed in the Act of 1858, take steps to remove the qualification, in which the defect was alleged, from the list of registrable qualifications.

10,884. May I take it that the effect of section 4 was to give you decidedly increased powers, and also to give you means of initiating and strengthening certain subjects if you wished?—Certainly. If we thought that any branch of medicine, surgery, or midwifery was insufficiently represented, as ascertained by the reports of our inspectors, we could say that that defect was such as to invalidate the whole examination if we thought fit, and the Privy Council would be made aware of that decision and be free to take action if it thought fit.

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10,885. So that the later Act really strengthened your hands considerably in the right to act?—Yes, undoubtedly.

10,886. Then will you tell us what section 19 does for you?—I ventured to cite that to show that if the General Medical Council failed of its duty in this particular or in any other particular which is prescribed by the Act, then it falls to the Privy Council to supersede for that purpose the General Medical Council, and to take exactly such action as the General Medical Council might have taken if it had not failed of its duty. The ultimate power is in the hands of the Privy Council. It can inspect; it can decide whether an examination is insufficient; it can strike off the qualification which is found to be insufficient without the process prescribed in the earlier part of the Act, which has to be gone through by the General Medical Council.

10,887. In fact, it could sweep you into oblivion and undertake all your functions itself in the last resort?—It could not sweep us into oblivion, I think, but it might do all we had failed to do, if what we had failed to do was our duty according to the Act.

10,888. Now we come to the exercise of the powers of the General Council. Would you please explain to the Commission the general way in which you exercise those powers?—We have retained the powers under the Act of 1858 of visitation, and we have of course added to them the powers of inspection under the Act of 1886, in order that we may continue to be advised as to what is going on, both as regards curriculum and as regards examination. We maintain two Standing Committees, the Education Committee and the Examination Committee. These are representative of the three divisions of the Kingdom. There are three members from each division of the Kingdom, and the President *ex-officio*. They take cognizance of everything, respectively, with regard to the curriculum, including the preliminary examination in general education which is required of medical students, and with regard to examination, including everything regarding the general conduct of examinations, the rules that apply for marking, and so on, and the particular manner in which particular examinations happen to be conducted from time to time. These Standing Committees meet certainly twice every year, and are required to report on any matters coming within their province to the Council at the session which is held at the same time. They are continuously occupied, and never fail to present reports of some kind or other to the General Council. Each has the power in the name of the Council of applying to the various licensing bodies for the information that I said we were empowered to demand, and every year at least they publish long tables obtained from the examining bodies, showing the number of candidates that went in for each examination, not the final examination only, with the number who pass, the number rejected, what particular subjects are examined in separately, and so on; and these are printed for our information, discussed if need be by the Council, and published in the Minutes of the Council, and so ultimately made known to the profession and the public. That is the standing machinery. Then the Council has made Standing Orders defining the procedure at visitations or inspections of all the examinations, and it has arranged that these shall take place in periodical cycles as we call them, separated by periods of years, and the instructions given to the inspector in each case are very minute. He has to "set forth in order all necessary particulars as to, the questions proposed in the written, oral, and practical parts of the examination, the cases and appliances provided for clinical examinations, the arrangements made for invigilation, the method and scale of marking, the standard of knowledge shown by successful candidates, and generally all such details as may be required for adjudicating on the scope and character of the examination." Then he has to keep a diary showing what he has done every day and every hour of the day while he is on inspection. I have here a copy of the Standing Orders governing these inspections. The Standing Orders for visitations are very much of the

same kind, but as visitations are generally made by members of the Council under the Act of 1858, their separate reports are rather for the private information of the Council itself, and are not necessarily published. What happened in the last case was that in some instances a visitor, that is a member of the Council, accompanied the inspector and saw for himself, and was able to inform the Council orally what he observed. But otherwise the visitor may make exactly the same inquiries as the inspector does. His reports are primarily for his colleagues, whereas the inspectors' reports are for the information and adjudication of the Council and of the Privy Council—the inspector is not a member of the Council—and the inspectors' reports are duly communicated to the Privy Council and published. The visitor's reports may or may not. He does not necessarily attend to the same details; he may pay attention to other things. In that way the reports on the final examinations of all the licensing bodies are discussed by the Examination Committee, which is very conversant with such matters. They call the attention of the Council to any matters for commendation, if a successful experiment has been made in some important respect, or any matters which call for condemnation if some particular branch of the subject has been insufficiently represented; if the marking is too easy; or if the candidates who pass are obviously ill-educated; and when that report of the Examination Committee calling attention to these points is brought before the Council, the report and the remarks thereon of the body inspected are discussed in full Council in public, and the report of the Examination Committee as well as the report of the inspectors on the particular examination is sent to the Privy Council and published. Then we have also the power under the two Acts to send other members of our Council, or to depute special visitors or inspectors to visit particular examinations that we may think for any reason require observation. I first spoke of the regular cycle which went over all the bodies entirely. If any body gives us reason to think that a little looking into their standards is desirable, we can send either a visitor or inspector, or both, to that particular examination, and form our own conclusions about it. In the case of one body, we have had it inspected or visited in one form or another as regards its examinations frequently, and on each occasion so far, they have been described as sufficient. But we still go on inspecting and visiting it from time to time, because it seems to have a wholesome tonic effect on the examination.

10,889. (*Sir Kenelm Digby.*) Will you kindly, for the sake of getting it on the notes, mention what those two Acts are?—The Act of 1858 and the Act of 1886, which I have already mentioned.

10,890. (*Chairman.*) Are you now satisfied that this system of inspection which you have so well described is efficient and effective?—I have not the slightest doubt that the system of inspection is extremely thorough, and brings to our notice in the minutest detail everything that ought to be remarked on in the case of every examination inspected. I will place in the hands of your secretary a series of reports at the last cycle, and I think anyone who examines them will see that nothing has escaped notice.

10,891. I understand that registration is practically entirely in the hands of the General Council?—Entirely.

10,892. You have the power to strike out names from the register if you think fit?—Only on inquiry, and on two grounds: if a person on the register has been convicted of any misdemeanour, felony, crime or offence, we can bring him before us, and if we think fit, in consequence of that conviction, strike his name off the register; or if he is charged before us with having been guilty of infamous conduct in a professional respect, we may hold an inquiry at which the person is summoned to be present, represented by counsel or solicitor as he may think fit, at which evidence is taken as nearly as possible in the manner of a regular court, except that we cannot put witnesses on oath; and the inquiry thus judicially conducted may result in the practitioner being adjudged guilty of infamous conduct

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in a professional respect, and his name is then removed from the register.

10,893. And you fully exercise that power? I understand that power applies only to persons who are on the register?—Only to persons who are on the register.

10,894. Do you think the general effect of all this medical machinery is adequate in maintaining a fairly uniform and high standard of medical teaching?—It is entirely successful, as I think appears in this: that it has raised the minimum standard which is required for what I will call the easiest qualification. I do not propose to specify what I think that is. But it is much higher than it was ten years ago perhaps, certainly much higher than it was 20 years ago, and vastly higher than it was when the Medical Council was established 50 years ago. It does not make for a uniform standard, because we place no check on any licensing body which demands a higher standard than we think is sufficient to guarantee efficient practice. Any body may ask as much more as it thinks fit, but it must not ask less than we think sufficient.

10,895. You think a dead level of uniformity might mean a lowering of the standard?—It would almost certainly mean a lowering of the average standard.

10,896. Whereas your object is to be continually pulling up the standards as you see your way?—That is the object, and I think the object successfully pursued by the Council.

10,897. Speaking generally, do you think your Council has now adequate powers for dealing with all these multifarious subjects?—I am afraid I do not quite follow you.

10,898. Do you think these two Acts conferred on the Council adequate power for dealing with all these many branches of this most important question?—I think in effect the action taken by the Council, in co-operation with the licensing bodies, has been to secure quite sufficient control over the medical curriculum and the medical examinations, supported at every point when necessary by the Privy Council. The nature of the constitution of the Council makes it particularly appropriate for bringing about a good common understanding as to what is a proper minimum in all the bodies. Every university, every licensing body, has a seat upon the Council. The member who represents a particular body ascertains what the general feeling of his colleagues is; and if a resolution of the Council is passed, he is able to take it back to his own body as one passed at a meeting at which he was present, in which he may be taken to have concurred. The result is the bodies understand our policy and co-operate with us in raising the standard, if that be necessary; and according to our ordinary British notions, that is a more successful procedure than if we had coercive power with no active sympathy on the part of the bodies we were authorised to coerce.

10,899. You do not wish for any extension of the powers which are at present vested in you?—So far as the curriculum and examinations are concerned?

10,900. Yes. I am coming to the other question afterwards?—I think the present machinery, so long as the present amicable relations exist between the bodies and the Council, is sufficient.

10,901. Coming now to the question of venereal disease, you say from the information in your possession, such questions, "bearing on syphilitic disease are set with such regularity by every licensing body that candidates cannot fail to be aware of the importance attached to the subject, and of the necessity laid upon them to study it seriously as a condition of success." I suppose we may take it that that is a fairly recent statement? You would not have been able to make that statement ten or fifteen years ago?—I am basing it chiefly on the reports which were dealt with by the Council in 1906; so it relates to the past eight years.

10,902. Then you very kindly made some special inquiries after this Commission was appointed, and you collected a variety of statements made by the different authorities. I do not propose to carry you through those replies, because I think they are very important, and we must have them printed and

attached to our report as evidence of the position in regard to these questions which existed at the time. But what I would like to ask you is whether, in your opinion, reviewing these replies as a whole, you think the present standard of teaching with regard to these diseases is quite adequate and sufficient?—I prefer to say that the present requirements of examination are such as to impress on the student the necessity of securing proper teaching. I may call your attention to the fact that these replies are from examining bodies, and I was anxious to ascertain what pressure they put through their syllabus and examinations and through the actual practice which they enforce in the examinations—what emphasis they laid upon the necessity of previous study of syphilitic and venereal disease; and the answers refer largely to examination tests.

10,903. Then I will put the question in another way. May we assume that the pressure which is now produced by examination is sufficient to make the teaching bodies regard these diseases with sufficient seriousness?—Yes, I think that is a safe inference to make from these answers. I ought to supplement it, however, by saying that probably not every school provides all the teaching that is necessary. But a student at such a school who goes up for a particular examination, not necessarily held by that body, will find he is obliged to get the teaching, if he cannot get it at home, somewhere else. I should not like to say every school is completely equipped with every appliance and means for teaching the subject; but the student must either find it there or somewhere else, otherwise he will come to grief in the examinations, which are held by bodies which may be independent of the teaching school.

10,904. I suppose from our point of view the important thing is that the extreme seriousness of these diseases should be impressed on the medical students, and that, you say, the examination is bringing about?—I believe it is bringing it about.

10,905. We have had a good deal of evidence that the older generation of medical men have not received sufficient training in these diseases. Supposing that now these diseases, as a result of our inquiry, are attacked vigorously, would you think that that defect in medical education will be found not to exist when the new generation comes on?—That is my impression, and it is a strong one. May I mention two points which I think have contributed to that improvement?

10,906. If you will?—In the older curricula under which men of 40 or 50 passed into the profession, pathology was a somewhat secondary and subordinate subject. It might or might not have been taken as a separate part of the curriculum. Now pathology looms very largely indeed in the course of the studies of a medical student. A very thorough course of pathology is required by all the bodies, and in that course is brought home to him the effects of syphilis and other venereal diseases in a way which the older practitioner was not taught. Secondly, the courses in surgery are very much more complete and elaborate than they used be in the days even when I was a student. A candidate for a purely medical qualification could get signed up in surgery, as it was called, with a comparatively slight acquaintance with other than the cases which happened to be in the wards when he was acting as a dresser, and so on. Now, the course is systematically and clinically much more complete, and no person could hope to obtain a qualification, which must include surgery, who has not studied much more thoroughly the whole subject, including this particular branch, than was formerly the case. These two reasons, the introduction of pathology as a substantive subject in the final or semi-final examination, and the great elaboration in the instruction of surgery, to all candidates, have made this branch of the subject take its right place.

10,907. Taking bacteriology, is the curriculum of medical students in bacteriology now sufficient to enable them to understand its full bearing on these diseases?—The course in pathology includes bacteriology, and every student who takes pathology cannot escape taking what is regarded, in the particular school where he studies, as essential in bacteriology. Whether

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every student has obtained all the knowledge of bacteriology that might conceivably be useful to him, I should not like to say. Every student at least is introduced to the subject, and his knowledge is tested in various ways in the final examination.

10,908. I suppose we could not expect that all medical men, even under the new training, will be able to make themselves accurate diagnosticians of these diseases; but they would all have the knowledge how to get the necessary tests made, and they would be certain to take that step?—What I would say is that any student now in training, any student who had qualified within the last half dozen years, knows that such tests exist. He has seen them demonstrated, and if he cannot himself carry them through, he knows that he can get them carried through, and recognises when they ought to be tried, and that is as much as I think we should ask in a minimum curriculum.

10,909. May we take it he would be perfectly able to take all material such as would be needed for the purpose of the Wassermann or the microscopic examination?—I would hesitate about the Wassermann.

10,910. I mean, take the material necessary; the blood serum?—He ought to know. There is a recognised procedure. He must have seen it done; and he would be in a position to re-inform himself of what had to be done, with intelligence, and with some experience.

11,911. That is, he would be able to take the blood serum and send it to the laboratory for examination?—I think any student now in training would certainly have the opportunity to learn that.

10,912. Do you think that in future general practitioners would be qualified ever to give salvarsan treatment, or would that treatment be confined to hospitals and institutions?—I should think the number of practitioners outside hospitals and institutions who are competent to give it would greatly increase. I should not like to say everyone would be justified in undertaking, or would care himself to undertake it; just as I would say that many perfectly competent practitioners would not like to treat particular diseases, say of the eye or the brains, although they had studied their nature and pathology. They would call in someone more expert than themselves to do it; but they would know when it ought to be done, and they would know what precautions to take. They would be safe as regards the salvarsan treatment, in the sense that the patient would not be subject to danger if they themselves were not prepared to administer it, for they would put him in competent hands. That again, I think, is about the minimum that we should demand.

10,913. Now, coming back to the question of registration, what privileges or rights does your register confer?—The man who is on the medical register is entitled to call himself a registered medical practitioner. No other person is entitled to give himself out by any medical title which might imply that he was on the register. He is entitled to sue for his fees in a court of law. A person not on the Medical Register is not so entitled. He alone can give a valid medical certificate, or any certificate of disease or death which is required by Act of Parliament. No other person can give a valid certificate of that kind. He is exempted in certain cases from serving on juries and in the Militia, and he alone is qualified by law to hold any office in the public service of a medical kind—the Army, Navy, hospitals supported in any way by public contributions, friendly societies, emigrant and other ships, and so on. He alone is qualified for holding a medical appointment in any of these services, which are either State Services or allied to State Services. These are his only privileges. He has no exclusive power of practising.

10,914. No exclusive power of practising; but considerable privileges on the whole and privileges conferred by law?—These are privileges conferred by law.

10,915. We have had a great deal of evidence pointing to a very large number of unregistered practitioners, quacks, claiming to cure these diseases, and we have also been told that the effect of such treatment is very serious indeed. Do you think any

strengthening of the law is required to check these practices?—The Medical Council has constantly taken every opportunity that arose to press upon the Government of the day the importance of restricting the free practice of medicine, surgery, and midwifery by unqualified persons, and it is very strongly of opinion that steps ought to be taken to prevent the cruel wrong which is done by permitting such free practice in branches of these subjects on the public without any previous qualification.

10,916. Have you made specific proposals to Government for dealing with this question?—Our recent method has been to make representations either to the Privy Council, or the India Office, or the Colonial Office, as the case arose. The case has arisen in this way: We are constantly consulted at the General Medical Council with regard to legislation or proposed legislation in the various Protectorates and in the Dominions of the Empire. The medical Bills or Ordinances which are proposed in these parts of the Empire are submitted to us. In many cases of late some particular clause has been inserted in these laws stating that the practice of any branch of medicine, surgery, or midwifery for gain, without qualification, is a penal offence. Whenever we have noted such a clause we have represented to the Government that we thought it a highly desirable thing that the same should be introduced into this country. Where we have found that the clause was not so inserted we have made strong representations to the Colonial or other offices concerned that we thought it was desirable that such a clause should be inserted, and in several cases with success. I think I almost annually make some announcement in my presidential address on the question; a special committee has been set up to deal with it; and there is not the slightest doubt that the experience of the Council—because we have had a great deal of information on the subject—shows what danger has been caused to the public from the lack of any restriction of unqualified practice in this country. I may say also that we took strong steps at the time when the first Midwives Bill was before Parliament, or rather before it even reached Parliament—the Clerk to the Privy Council will bear me out in this—to secure that a clause should be inserted in the Midwives Bill saying that no woman should practise midwifery habitually and for gain unless she was certificated and on the roll of midwives, and our representations in that respect were successful. After a sufficient period of notice, some four or five years, that clause came into operation, and now no woman can practice midwifery for gain in England, unless she holds a statutory qualification.

10,917. Then the public is much better protected against unprofessional and ignorant midwives than it is against quacks?—Any person can practise surgery even, in its higher branches, without having any knowledge whatever of the subject. No woman can practise even elementary and what I may call natural midwifery without having some qualification.

10,918. And that is a distinct anomaly, is it not?—I should use a stronger expression. I may say also we have called the attention of the Government to the fact that without difficulty the veterinary surgeons have obtained an Act which protects them and protects the lower animals, so that no person can use any title suggesting he has a veterinary qualification or practise as a veterinary surgeon on the lower animals without being qualified.

10,919. Then Government has protected animals much more effectively than it has protected human beings against the ravages of the quack?—That is certainly the case.

10,920. Do you think that a special case could be made out against the unprofessional treatment of these diseases by reason of their severity and their grave effect upon the population?—I think a very strong case could be made out; certainly stronger than that made out, and successfully made out, in the case of the midwives. The mischief done from the ignorant treatment of these diseases is more far-reaching, and therefore more dangerous, than the mischief, great as

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it is, which may be done by an ill-trained woman in helping her neighbours, for example, in ordinary cases of labour.

10,921. And you think it would be wiser to confine ourselves to trying to stiffen up the law in the direction of these particular diseases rather than any general provision against quackery?—The general argument is equally strong in all directions. I think as you used the word “wiser,” my Lord, I should say it would be more easy to impress Parliament with the urgent necessity for restricting unqualified practice in these diseases than it has been in the case of, let us say, dentistry, or administering domestic remedies, by an unqualified person.

10,922. Supposing it were made penal for unregistered persons to treat any of these diseases, do you think the difficulty of enforcing such a provision of the law would be very great?—I think it would be less great in this particular branch of practice than in almost any other, and for this reason: that no person can successfully practise for gain in this region without a great deal of advertisement of one kind or another, and by the advertisement you would catch him. A certain amount of quite quiet treatment might go on over a so-called chemist's counter. People come to him spontaneously, and he treats them, and so on. He may or may not treat them wisely, but no very great harm is done, because he does not go out to seek the public. But in the other case no man would find practice worth his while, unless he attracted his public, and the only way of attracting them is by advertisement. If not only practising without qualification, but advertising that you are prepared to practise, were made penal, my impression is that it would not be difficult to suppress these dangerous persons.

10,923. Then you would direct your efforts mainly against the people who practise in these diseases for gain?—For gain undoubtedly.

10,924. Now you have a great deal of experience of what is going on with regard to these diseases in other parts of the Empire. Has it been the case that in the Dominions there has been a stiffening up of the law in protection of the people from quackery, patent medicines, and things of that sort?—In one, if not two, of the States of Australia, recent legislation has made the advertising by unqualified practitioners, who give themselves out as prepared to treat various maladies, penal. I think, however, I should like to verify this. New South Wales was one, I believe, and if I am not wrong, New Zealand is another. I am not perfectly sure, but I have had through my hands in the last few years these documents, and if I had known I should be asked, I should have come prepared to answer.

(*Sir Kenelm Digby.*) Would those be later than in this medical publication we have here?

(*Sir Almeric FitzRoy.*) This is what was issued after the inquiry?

10,925. (*Sir Kenelm Digby.*) I see that was in 1909?—No; I think one of the instances was certainly before 1909. The other may have been after, but I cannot recollect. You will get them from the Colonial Office. Then I notice also in some of the Ordinances for the Protectorates, although one would have thought it was less urgent there, some similar provision has been made, and a clause provides that any person who gives himself out as prepared to treat human maladies or suffering, without being qualified, shall be guilty of an offence, even apart from actual practice. The tendency, therefore, has been in recent Colonial legislation, if I may use a general expression, to take account of publishing yourself as willing to treat, and making that in the case of an unqualified person, a penal offence.

10,926. (*Chairman.*) Then the effect has been greater protection of the public in the Dominions from the operations of the quack?—That is a marked tendency.

10,927. Is there any other point you would like to bring before the Commission?—Let me say this in explanation of a previous answer, my Lord. I spoke of our periodical inspections, and of a cycle of inspections. That usually takes three or four years to complete, for

the simple reason that there are something like 22 or 24 licensing bodies, and they tend to have their examinations about the same times of the year. It is desirable that the same inspector should report on medicine in all the bodies, another inspector on surgery in all the bodies, and another on midwifery in all the bodies, in order that a comparative judgment may be formed on them all. The result is, that we cannot well inspect all the bodies in any one year; and, therefore, we have to distribute it over three or four years, or five sometimes. The last one was completed in 1906, that is to say eight years ago. But we are also charged with the duty of inspecting the dental examinations, because the Medical Council has to do with the registration of dentists; and we have just completed a dental cycle in the interval since the last medical one. It is about time we began a new medical one, and the first steps have been taken to start that. It might be desirable, if this Commission thought so, to ask the Medical Council to give special attention at the next inspection to these diseases, so that the inspectors' reports might show whether or not the answers of which I have given you a summary were, in effect, justified by the actual practice of the bodies in question.

10,928. Is the General Medical Council consulted by the Registrar-General when any changes are made in his schedule of diseases?—The Registrar-General has been in very frequent correspondence with the Medical Council, but rather on the conditions of the general law than on the table of nomenclature of diseases. The table of nomenclature of diseases has been drawn up by a Committee of the College of Physicians, and accepted more or less by the Registrar-General as coming from a highly-competent body. But such changes as he may think fit to introduce are usually communicated to us, and hitherto we have done no more than acknowledge them, because strictly it does not come within our province. He may have asked our opinion on some point or other.

10,929. But as you are one of the highest medical authorities in the kingdom it would be natural that you would have some views upon this very important question of registration?—We have.

10,930. Are you satisfied with the present nomenclature of diseases as adopted by the Registrar-General?—The one now current is a very great improvement on the one which was current ten years ago. I do not think we have ever passed any critical opinion upon the present table.

10,931. Do you think it is satisfactory as regards venereal disease; that is to say, does it sufficiently bring out, or bring out as much as it might, the prevalence of those diseases as a cause of death?—No, my Lord, I am not satisfied that it does. There is a reason. The certificate of the cause of death is handed to the relatives. We have had communications as to whether some change in the manner of certifying should not be made which would enable the practitioner to put down, for the information of the proper authority, what he believed to be the remote as well as the proximate cause of death—in scientific terms, according to some uniform nomenclature. That would probably require a change in the law. I have not the slightest doubt what the opinion of the Medical Council will be when it is asked about that.

10,932. You think the Medical Council would approve of a change of that kind?—The Medical Council has on more than one occasion indicated that something of the kind is urgently needed. It also desires (and this connects this subject with the one you have just dealt with) that a certificate of the cause of death from a medical man should be presented in every case of death, or a coroner's inquest held. We have perpetually complaints from coroners, local officials, and so on about certificates purporting to be certificates of death, signed by unqualified persons, being sent in, and we are powerless in the matter, and the Registrar-General tells us he is powerless to prevent it. These so-called certificates are in fact not certificates at all; but they are sometimes accepted by local registrars as what is called evidence of the fact of death, and it rests with the local registrar to say whether what purports

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to be a certificate shall be accepted or shall not be accepted, the cause of death being then returned as "uncertified."

10,933. That surely is a very loose state of things, is it not?—It is disastrous.

10,934. I always thought that the certificate of a registered medical man was the only certificate which could be accepted. Is that evaded?—It is evaded, because registrars are instructed that, although the unqualified man's statement is not a certificate, it may be taken as evidence of the fact of an "uncertified" death. The law does not say that a valid certificate of the cause of death must be furnished in every case.

10,935. But does that suffice for all the purposes of the Registrar-General? Is no proper medical opinion brought to bear on that death at all?—It entirely depends on what the local registrar thinks sufficient. If he happens to know the unregistered practitioner he says "Yes; this is an uncertified death, but no further inquiry will be made." He calls it uncertified as to its cause, but for the fact of death he accepts the evidence of the unqualified person.

10,936. Do you think that practice exists to any great extent?—I am sorry to say it does.

10,937. Then it must go very far to vitiate all the figures of the Registrar-General, must it not?—It vitiates them to a serious extent. You will find a large number of the returns of deaths which he is obliged to make as "uncertified," which are not the subject of inquest, and as to which therefore there is no real evidence as to what the patient actually died of.

10,938. (*Sir Almeric FitzRoy.*) No authoritative evidence?—No evidence, I think I would say. The unqualified person who presents the quasi-certificate which was accepted as evidence of the fact of death, may say A, B, C, or D, was the cause of death, but that is no evidence; he does not know.

10,939. (*Chairman.*) I understand from you there may be other cases which would not be included in that column of the Registrar-General's returns, for which there was no proper medical evidence?—Those that are certified are certified by medical men or by a coroner after inquiry. There is evidence in these cases of what the cause of death was. The statements submitted in the cases of uncertified deaths may have a disease attached to them; but there is no evidence that that disease was the disease from which the patient suffered. The Registrar-General cannot ascertain the diseases of the uncertified, as there is no medical evidence he can proceed upon.

10,940. No medical evidence?—No medical evidence or coroner's certificate.

10,941. (*Dr. Newsholme.*) With regard to this question of uncertified deaths, I think they formed not a very big percentage of the total number?—Taken all over the country that is true; but I am sorry to say that in particular districts the percentage is high.

10,942. In Wales, for instance?—Yes.

10,943. And also the County of Durham?—In the north-east part of England.

10,944. There some registrars, as you have told us, do accept the certificates or statements obtained from these unqualified men?—Yes, for what they are worth.

10,945. You would like in addition to these statements, to insist upon a coroner's inquest, I think you said?—On a coroner's inquest, or, if the law were changed, a certificate of a pathologist or some qualified man.

10,946. That certificate of the pathologist would be of no use under those circumstances unless it were based on a post-mortem examination?—I quite agree.

10,947. And in your opinion, I take it, such a certificate based upon a post-mortem examination would be very much better than the average coroner's inquest without such examination?—Certainly.

10,948. So that the proposal you are making is a proposal, which I believe was made by a Departmental Committee, to the effect that there should be a skilled pathological inquiry into the cause of death where no medical practitioner has been in attendance on the

deceased?—That seems to me an improvement on the coroner's inquest as the alternative.

10,949. I quite agree. With regard to the actual certificate of death not being satisfactory when made out by a practitioner, one reason might be the fact that the practitioner did not wish to offend the feelings of the family. That probably is the main reason, is it not?—I understand that is the case.

10,950. But there would be other cases, would there not, in which syphilis was a very remote thing, and the immediate cause of death was some acute disease?—Yes.

10,951. In those cases would you also put syphilis in the death return?—Certainly.

10,952. I do not know whether you are aware that in the last report of the Registrar-General he has taken a step forward in improving that state of matters. He is taking certain selected diseases every year, and proposes to go through the whole of the causes of death in 10 years; so that whenever the word "syphilis," for instance, is mentioned, whatever it is along with, syphilis would be entered in the table for that particular year. In other words, you get secondary causes of death as well as primary, and remote causes of death as well as immediate. That you would regard as a very great improvement in the Registrar-General's tables?—Very great.

10,953. That was introduced in the year 1911. The question of nomenclature is settled, as you told us, largely by the College of Physicians, decennial alteration of the system of nomenclature, is it not?—The Registrar-General accepts their assistance, I think, is the safest way to put it.

10,954. That is so. With regard to unqualified practice and the possibility of taking steps against that, you consider it would be quite relatively easy to take special steps in regard to venereal diseases?—I think it would be specially easy to bring to book, if I might so call it, unqualified practitioners in this particular branch.

10,955. And you would catch those unqualified practitioners in venereal diseases by means of their advertisements to a large extent?—That would make it easier.

10,956. Supposing they were not advertising unqualified practitioners, it would be very much more difficult to know that the disease they were treating were venereal in character?—True.

10,957. And in those cases it would be very difficult to catch those practitioners, would it not?—Yes.

10,958. Consequently the method of getting the evidence by means of advertisements would fail with respect to the large number of pharmaceutical chemists and herbalists who do not advertise specially as regards these diseases?—It would be more difficult to bring it home.

10,959. Yes. You know, of course, that pharmaceutical chemists do practise in respect to these diseases to a very large extent?—I have heard that.

10,960. We have not any reasonable doubt, I think, that they do so, especially with regard to gonorrhœa?—That is a current belief.

10,961. It has been stated here in evidence that medical students leaving the medical schools are not qualified to treat venereal diseases, and especially not qualified satisfactorily to treat syphilis; and on the basis of that statement it has been argued that, if that be so, why should you object to pharmaceutical chemists treating these diseases? I think you would agree with me there are fundamental differences between the two sets of people?—I have given one reason: that all the medical students have been through a course of pathology, and at least they know the nature of the disease and the appearance of its manifestations in the body both immediate and remote. The pharmaceutical chemist is not required to go through any course of pathology, quite apart from his lack of training in medicine and surgery.

10,962. So that although the fully qualified medical practitioner might not have had any experience of the treatment of these diseases, he knows the dangers associated with them, and he is familiar with their pathology, and therefore he is on quite a different

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platform from the pharmaceutical chemist?—Yes; he knows where to look for and to find the necessary supplement to his knowledge, as it were.

10,963. There is one further point with regard to the knowledge of the practitioner, or his competence rather, to take specimens of the blood for Wassermanns. In your own city of Glasgow, I am informed, they have begun the practice of paying the practitioner 2s. 6d. for sending the sample of blood in order that the Wassermann test may be applied. I believe I am right in saying that one reason for thus giving a fee is that before that was done, very often the specimens were defective in character—too little blood, and so on?—Yes. We have three or four bacteriological and clinical laboratories in Glasgow, one at the Royal Infirmary, one at the Western Infirmary, one at the Victoria Infirmary, and one at the Municipal Public Health Laboratory, where investigations of the kind are made. I think the fee was introduced largely to induce practitioners who sent specimens to these laboratories to comply with the directions which they were provided with, and which were somewhat more troublesome and minutely laborious than they might otherwise have been prepared to observe.

10,964. That was stated to us last week by Dr. Chalmers. But another point was mentioned, either in evidence or separately, I forget which, namely, that many of these doctors did not send in satisfactory specimens?—That is quite true.

10,965. Presumably they were the older practitioners?—At first the thing was unfamiliar; it was not known exactly what was required. But the familiarity has now extended over three or four years, and I think it is widespread now.

10,966. On another point a statement has been made that the practitioners have not a very high standard of conduct, and do not sufficiently emphasise the possibilities of continued infectivity after a short course of treatment. In a recent article in the *Medical Journal* of March 15th by Dr. Bayley, he states "The responsibility for the prevalence of inflammatory pelvic conditions in young married women is shared equally between the doctor and the husband, indeed in many cases the doctor is more to blame." The implication being that the husband is not warned of the possible continuance of infectivity of the gleet, with the result that the wife becomes infected and a chronic sufferer. Would you attach much importance to that statement?—I think the word "doctor" must be taken in a very wide sense there, as the patient may have more than likely been treated by someone who was not a qualified practitioner at all. If you include in the term "doctor" the person, whoever he was, who treated him, then I should say it was probably true.

10,967. I do not confirm the statement. It is said here "Doctor"?—I do not think he meant it to apply to qualified persons only.

10,968. But so far as the training of medical students is concerned, that kind of thing ought not to happen?—The importance of that kind of thing is continually insisted upon to my knowledge in the courses of gynaecology, obstetrics, and so on. I think sometimes the emphasis depends a great deal upon the special experience the teacher can bring to bear. I have heard it almost unduly insisted upon, as if it were the main factor in all women's diseases.

10,969. Another somewhat allied point has been mentioned to us, that is, the question as to when a young man who has acquired primary chancre, perhaps within six months, wishes to marry, and refuses to take the advice of the doctor not to marry, but persists in doing so; whether the doctor has any duty in regard to the prospective wife? I know that is a very difficult point. I do not know whether you would wish to give any opinion upon it?—The prospective wife is not the patient?

10,970. The prospective wife is not his patient, and the conscientious doctor has either to connive, so to speak, at the probable infection of the wife, or he has to betray his professional confidence?—His position is very difficult indeed. But if I were asked absolutely, I should say he had no professional duty to the prospective wife. It is sad; but he has no professional

duty which could be enforced to the prospective wife who is not his patient.

10,971. May I put another question arising out of that. It is an almost impossible contingency, but supposing he did go to the prospective father-in-law and told him the danger to which the young lady was about to be exposed, and supposing that the matter came before the Medical Council as a question of unprofessional conduct, I suppose there could be no doubt about the fact that the Medical Council would refuse to hear such a case?—I do not know about refusing to hear it if there were sworn evidence and so on; but the Medical Council judges in such matters as it sees fit, and I think there is very little doubt, speaking of my colleagues, that they would not see fit to regard him as having been guilty of infamous conduct in a professional respect; but I am afraid the common law of the land would not protect the doctor in such a case. Professional opinion would certainly exonerate him if he acted in the interest of the innocent and in good faith, but he might be subjected to severe penalty from the side of the ordinary law.

10,972. (*Sir John Collie*.) In Scotland, when the local registrar declines to accept the notification of a death by an unqualified practitioner, I suppose the Procurator-Fiscal makes the necessary investigations?—He has the power to do so if he thinks fit.

10,973. Do you know whether, as a matter of fact, he does take the place of the coroner's inquest in this country, in that particular matter?—I think the coroner in England acts much more frequently than the Procurator-Fiscal does in Scotland. That is to say, the Procurator-Fiscal has the power of making a private inquiry and satisfying himself without any public inquiry. The coroner, I understand, has no such power; he must hold an inquest.

10,974. (*Rev. J. Scott Lidgett*.) I have only one question. Can you give laymen like myself any information as to the extent to which the medical schools are at present prepared, all or almost all of them, to give demonstrations in the Wassermann test and salvarsan treatment to the students?—I cannot, of course, speak for every school, but from such information as comes to me, I should say nearly every school, if not every school at the present moment.

10,975. Does your answer apply to this country or to the schools of medicine beyond this country with which the Medical Council has to do?—I mean England, Scotland, and Ireland. The medical schools in Ireland and Scotland are all under university or Royal College supervision. In England there are many hospital medical schools which are independent bodies. I, therefore, cannot speak for every one of them individually, but in every university school, and in every college school in the proper sense of the word, I think, from the answers I have received, there can be no question that they are prepared to give demonstration and instruction in these two matters, and that in fact they do provide it.

10,976. As to the second class, is it your impression that they are taking steps to put themselves into a position to do this?—I should think there can be very little doubt about it; they could not afford to decline.

10,977. Does the same apply to medical schools in our great dominions and dependencies?—That is far too wide a question for me to answer. Some of them are in the highest rank, and some of them are not so high.

10,978. (*Canon Horsley*.) It is pretty evident that a medical student could not escape if examined on some point connected with venereal disease now, whatever he may have done some time ago. But at the different hospitals or schools he is at there will be variations as to the amount of teaching given no doubt?—Yes.

10,979. Supposing I were a medical student in a place where there was not much teaching given, is there anything to hinder me going to someone else to get instruction on that?—That varies with the school, there is nothing to hinder you.

10,980. I could go to another college or hospital for special lectures on that?—That is continually done in the case of the hospital schools in London, where they themselves have not a particular department for

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any branch. Students go to special hospitals to supplement their work.

10,981. I did not know how far a man, say at St. Bartholomews, was obliged to get all his education from St. Bartholomews?—Let me point to one or two things he cannot; for example, fevers or asylum cases.

10,982. He is allowed to go out and can go out?—He must go out.

10,983. Has he to pay extra for those things?—Certainly; but then he cannot do without them. St. Bartholomews, let us say, does not charge for what it does not supply; but it is a necessary part of his curriculum.

10,984. Supposing the student or his father is paying for him; he is rather penalised if that particular hospital does not give him adequate information?—Quite.

10,985. Because he has to go outside and pay more for it to pass an examination?—Yes; but then he has not paid for these special branches in his inclusive fee to the school.

10,986. (*Dr. Mott.*) You said that he knows where to find the supplemental knowledge; that is to say, if a man were unable to get sufficient teaching in a hospital, he would go to the Lock Hospital, for example?—Yes, one of the special hospitals.

10,987. You will recognise that the diagnosis of the primary sore is of very great importance?—Of very great importance.

10,988. We have had such extremely valuable evidence from the army and the navy and so much of the late forms of nervous and arterial disease have probably been due to the fact that what was thought to be a soft sore was really syphilis, that therefore it is very important that the student should be able to diagnose the disease in the primary stage; and if he is not able to give the necessary treatment he can send the patient somewhere where he can get the necessary treatment?—That was the purport of my answer: that he at least was aware of what had to be done.

10,989. Do you think at the present time students ought to be able to diagnose the primary sore?—I should have thought so undoubtedly.

10,990. I doubt it; because I did not find that when I examined them upon it; a good many failed on that?—But they did not get into the profession?

10,991. I do not know about that. You see you cannot reject them if you have marking. You can only refuse to give a mark for that particular question. But someone else may give them enough marks to pass them. I must say I do not think they are sufficiently instructed—at least, I think they will be now. As I pointed out, it is only a recent thing that we ourselves have known about and we cannot expect students immediately to take up a new point in bacteriology?—You are speaking of the bacteriological diagnosis?—Yes.

10,992. Yes?—Then I withdraw what I said. I did not mean that every student now necessarily knows all about the bacteriological diagnosis.

10,993. No; but I mean to say this. Supposing we say a practitioner is qualified to diagnose by this method, he will not look himself for the spirochæte, but he will withdraw some of the exudation and will send it up to the bacteriologist to have it examined?—I should think that was a more certain method of making out the cases that occur than trusting to merely external recognition by the practitioner himself; because at least two persons, one of whom is an expert, will be concerned in making diagnoses.

10,994. But the question is whether the student is at present taught how to do that satisfactorily?—To recognise the necessity for it?

10,995. No; to obtain the serum from the chancre?—I think it is being widely inculcated. Whether it has successfully spread to all the schools or not, it is difficult for any one of us to say.

10,996. Then it has been proposed that there should be night clinics, because it is very difficult for these people suffering from venereal disease to attend in the afternoons and therefore a great many cases would come at night and the students would then have

to attend the course at night in order to obtain the necessary information. But I thoroughly agree with you that if you want anything learnt by the students, the way is to examine them upon it and that is the only way to make them read up and study a subject practically; I think there is no doubt that that is the way?—That is where the Medical Council comes in.

(*Dr. Mott.*) I agree.

10,997. (*Mrs. Scharlieb.*) Some of our witnesses have told us that these subjects are not taught in all London hospitals because there are no special beds allotted to these diseases and also that in some of the hospitals it is contrary to their charter or contrary to their law; and in some of the hospitals they are afraid to admit these diseases so that they may be treated and the students may be taught, because they fear they will lose the subscriptions from the public. If that be the case is it not desirable that something should be done to strengthen their hands?—I should have thought it more desirable to make it easy to gain admission to the special hospitals and to the established clinics in them than to attempt to compel every general hospital to have some provision for these diseases, the reason being that in a special hospital with a special clinic, probably everything that is modern and everything that is known would be elaborated and presented to the students. If you merely desire to set apart a few beds in a general hospital which opens them reluctantly, then it is a makeshift and the students will suffer.

10,998. But must we not try to get the public and the hospitals to understand the disease as disease, and it is to be treated as disease, and therefore you must try to do away with the stigma that attaches to it? Is it not probable that a very large number of people who need treatment do not like to go to these special hospitals because at present they are branded by doing so?—That is only because the special hospitals have been largely limited to unfortunate women. There is no difficulty about going to the hospitals of the Metropolitan Asylums Board when you are suffering with infectious disease. These used to be dealt with in the general hospitals. It is for the good of the patient, for the good of the public, and for the good of the student if they are now treated at separate hospitals. I should put these diseases on a similar footing; but there is no reason if there is sufficient accommodation in a general hospital why some beds, and an adequate number of beds, should not be set apart for these simply as cases of disease.

10,999. Yes; as disease?—Not as particular disease, but please also to remember that the manifestations of, say, syphilis, or even gonorrhœa at its later stages are such that there are few wards that do not contain examples of them in one form or another. What you are specially referring to, as I understand, is the acute and special manifestations?

11,000. Yes?—They might very well be treated as acute or special diseases.

11,001. Partly with a view to the convenience of patients, and partly also with a view to the convenience of students, it would appear to some of us that the treatment of them in general hospitals would be more convenient, because, as I said before, the patients do not like going to these special hospitals where everything is known. I mean, where there is a mark on them if they go there, and also the students are so busy; there is so much necessarily required, so much more so than 25 to 30 years ago, that we ought probably to make it as easy as possible for the student to acquire an adequate knowledge?—I quite agree that if there is accommodation for a sufficient number of illustrative cases of acute venereal disease in a general hospital, then the balance of advantage would be to treat them there.

11,002. (*Mrs. Creighton.*) I want to take you back for a moment to the question of unqualified medical practitioners. Have you any knowledge of how those clauses making such practice penal are observed in the Dominions?—I think that before the introduction of the Act in New South Wales, if I am correct, we continually were receiving at the General Medical Council

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complaints against practitioners and others, registered or not registered, as the case might be, in the United Kingdom, who were guilty of association with flagrantly advertising firms in the Australian papers. We had to take action against a number of these, one lady doctor, and several men, all within a few years. Since that we have ceased to receive such complaints. I think in the last four years we have only received one. My inference, therefore, simply speaking as President of the Medical Council, is that something has happened to make it less clamant that complaints should reach the Medical Council about unprofessional advertising. And if unprofessional advertising by registered persons associated or not with unregistered has been checked, I should suppose unqualified practice has been checked also. That is the only direct means of information which I can mention.

11,003. And when the General Medical Council urge that similar restrictions should be imposed in England what answer do they receive? What are the reasons for not doing so in England?—No Government we have yet succeeded in approaching is prepared to take up the proposal.

11,004. Have you any idea why the Government object to what would seem such an obvious measure? I think I can indicate pretty clearly their objection. That is, that it would not receive sufficient support in Parliament.

11,005. We have been told here that the unqualified practitioners are really a political party, and have considerable political power. Do you believe that that is the case?—I have evidence of it. We brought up, on behalf of the Medical Council, with the cognisance of the Privy Council, some few years ago, two Bills, which we thought to be so obviously desirable that we expected them to pass. One was to prevent a medical company starting in practice and calling itself by a medical title for the purpose of obtaining patients. The Medical Act says that "John Jones" must not call himself "M.D."; but the Companies Act makes it possible for "John Jones & Co.," to call itself "M.D.," and practise as a doctor; and we said no company of unqualified persons should take a medical title and practise medicine as if qualified. That Bill was opposed and ultimately failed. We had a similar Bill for dental practice by companies. That was brought before a Committee of the House of Lords, and gentlemen like those who have appeared before you, as I understand, my Lord, also appeared in opposition to that, and that was thrown out. We have also proposed very simple Bills from time to time, such as to provide that when the Medical Council struck a man off the Register on the ground that he had been convicted of felony, or that he had been guilty of infamous conduct in a professional respect, he should be deprived of the use of his medical title; that he should no longer go on calling himself M.D., although no longer on the Register, because at present he can continue to use that degree. We proposed that the university or other body that had conferred the title on him should be empowered, if it thought fit, to remove his degree. That was opposed by the friendly societies and their representatives in the House of Commons, and defeated. At every turn, whenever we have proposed a Medical Bill, we have found that somehow or other it touches those who are interested in unqualified practice, and whether we can always put our finger on the exact place where the pressure has been brought to bear or not, the result has been the same. I think I am right in saying that no Medical Act Amendment Bill, which tended to restrict unqualified practice in any way, has got through the House of Commons during the time that I have been connected with the Medical Council, about 25 years.

11,006. Then with regard to death certificates; am I right in inferring from what you said, that the Registrar-General has no power over local registrars?—He can issue general instructions, but I think I am right in saying that a certain discretion as to what he shall do with a thing purporting to be a certificate by an unqualified person is vested in the local registrar.

11,007. (Mr. Lane.) I understood you to say that the Medical Council have power to send the visitor to the examinations? Is this frequently done?—Yes.

11,008. Because I have been an examiner for seven years, and I have never been aware that I have been undergoing a visitation?—I suppose since the completion of the last cycle, the particular body of which you happen to be an examiner has not been called to the attention of the Medical Council by anything which suggested the necessity of inspection.

11,009. You say that "the examination papers which are in the possession of the Council enable me to say that questions bearing on syphilitic disease"—I suppose that would also include venereal disease?—Yes. It happened that in the examination I made of the papers I just looked for syphilitic disease; I did not look for any other. I only speak of what I myself noticed.

11,010. "Are set with such regularity that candidates cannot fail to be aware of the importance attached to the subject." I have been looking through the papers for the last ten years, and I find that four questions have been put on syphilis at the College of Surgeons, and five on gonorrhoea or some of its complications?—These are printed questions?

11,011. Yes?—I was referring also to the oral examinations in medicine and surgery.

11,012. There have been only four questions on syphilis in ten years. Is that a sufficient number, do you think?—Remember, that the examination paper of the Royal College of Surgeons contains only five questions.

(Dr. Newsholme.) Would you mind saying how many that nine was out of? What was the total number of questions?

(Mr. Lane.) There are four examinations a year, and there are six questions in each examination. That is 240 questions.

(Dr. Newsholme.) Nine out of 240.

(Mr. Lane.) Nine out of 240, four of them being on syphilis and five on gonorrhoea. That is in the written paper.

11,013. Then by you, as President of the Council, this circular letter was sent out to the officials of all the licensing bodies in the United Kingdom. Were these officials the office officials or the medical men?—The deans of the faculties, registrars, &c.

11,014. At the College of Surgeons for instance?—I have an answer from the registrar and from the secretary, Mr. Hallett, and from Dr. Ormerod.

(Mr. Lane.) That would be for the combined colleges; but Mr. Hallett has no particular knowledge of venereal diseases.

11,015. And one of these reports is from Mr. Hallett, I think. I think I can see which one it is. He says: "the examiners attach the gravest importance to venereal diseases. No diseases are more frequently examined on"?—I have also the answer from the Chairman of the Court of Examiners.

11,016. And the Chairman of the Court of Examiners says that special stress is laid on examination in these diseases?—During the last ten years, he says, 17 per cent. of the questions in the written papers have reference to syphilis.

11,017. Yes. I do not agree with him there?—That is an internal matter. Perhaps he includes the papers in medicine, and you refer only to those in surgery.

11,018. The student has to take out a course of vaccination, I believe, before he can come up for examination?—That is required by the Local Government Board, not necessarily by the licensing body; in order that a person qualified and on the register may hereafter, if he desires, be appointed a vaccination officer.

11,019. But he cannot go up for his examination until he has had a course of vaccination?—If the college orders that to be so it is so; but it is not a part of the medical curriculum *per se*.

11,020. Would you say that the ability to vaccinate was more important than the ability to administer salvarsan?—Yes, the ability in every practitioner to do it.

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11,021. I understood you to say the medical student could not escape being asked a question on venereal diseases?—Did I say so?

11,022. I understood you to say so, in answer to a previous question?—No. I said he could not escape being made aware of the essential importance of the subject.

11,023. (*Sir John Collie.*) I think what you meant was, escape the possibility of examination?—Escape the need of knowing anything that he might be asked; and therefore that will control what he studies. It is quite possible he may escape being asked a question.

11,024. (*Mr. Lane.*) The Medical Council has no power, I take it, to superintend the instruction given at different hospitals?—None whatever.

11,025. So that they do not know in the least whether this particular subject is being adequately taught at any particular institution?—They cannot answer for any particular institution.

(*Sir Malcolm Morris.*) I have no questions to ask you.

11,026. (*Sir Almeric FitzRoy.*) I take it that you fix the statutory responsibility of maintaining the standard of medical proficiency first on the General Council, and as a second resort upon the Privy Council?—Yes.

11,027. It is clear from section 4 of the Medical Act of 1886 that as far as the licensing bodies are concerned, the Privy Council would be apprised of any default on their part by the General Medical Council?—Yes.

11,028. But when we come to section 19, which begins, as you know, "At any time it appears to the Privy Council that the General Council has failed," &c., how do you think, in the event of such an improbable circumstance occurring, that the Privy Council will be apprised of the failure of your body. You are not bound to report yourselves?—Let me imagine a very possible circumstance. The Medical Council contains 35 or 36 members. They are not all of the same mind on every question. A resolution might be proposed that such and such a body was below par, and it might be lost because the majority voted against it; but the minority might have no hesitation in referring the question to the Privy Council.

11,029. You think they would not. They never have done so, but perhaps such a case has never arisen?—No such case has arisen that I know of. On the other hand, such bodies as departmental committees, and there have been many, such as on anæsthetics, certification of deaths, and this particular Commission might say they had ascertained that particular parts of the curriculum were badly dealt with by the Council in the matter in question, and they might communicate with the Privy Council.

11,030. How many years has your experience of the General Medical Council covered both as a member and as president?—I have been about 25 years a member, and I have been president about 10 years.

11,031. There has been no occasion within your knowledge to invoke the punitive action of the Privy Council with regard to any of the licensing bodies?—We have found the possibility of reporting to the Privy Council was quite enough. I have mentioned the single case of a board now extinct.

11,032. Do you ever meet with any recalcitrance or any suspicion on the part of the licensing bodies?—With regard to the matter of curriculum?

11,033. Yes, and examination?—When we have reported, or rather our inspectors have reported, that a particular examination was capable of improvement, we sometimes have had protests that the report was unfair, or something of the kind. In such a case we have had another report, or a fresh investigation, and before a year was over the matter was put right.

11,034. On the whole you can rely on the co-operation of the licensing bodies?—I think they co-operate loyally. We have always sought to work with the licensing bodies.

11,035. With regard to these opinions upon examinations which are appended to your evidence, would you object to attaching the name of the

licensing body to the statement made on its behalf if it was thought of any value?—I have no hesitation; but in writing to ask for these statements, I said "which may be marked confidential if you think fit." I could ask their leave.

11,036. They were marked "Confidential"?—Some of them were, and some of them were not.

11,037. I do not know whether it is of any particular importance?—The particular identification is not perhaps required; but I would simply send a circular round saying, "I propose to attach your name to this particular summary, unless you object."

11,038. I do not press that point?—I could do whatever the Royal Commission wishes.

11,039. Your evidence has gone, as you think, to establish the fact that the machinery, such as it is, is worked in a satisfactory and regular manner?—Everything that we have brought to the attention of the bodies has sooner or later been put in such a state that we have no longer any complaint.

11,040. And, further, you think it has been established that the licensing bodies have an adequate sense of their responsibility in regard to the particular branch of medicine and surgery before us?—That is the purport of the answers I have received. There is no exception, I think.

11,041. I want to call your attention to a statement of Dr. Carl Browning, who I think is connected with Glasgow University you mentioned just now?—He is a lecturer at the University.

11,042. It was not brought out in his evidence; but "in an article contributed to the British Medical Journal" on 10th January this year, he says: "Adequate clinical instruction on this disease is seldom given to students." You would disagree with that?—Adequate clinical instruction on the disease?

11,043. Yes?—He is speaking of the earlier manifestations?

11,044. Yes. Do you think that is so?—I should hesitate to say that that is so.

11,045. You think that is too large a statement?—Yes. He is one of the best men in the country, but his experience is mainly from the laboratory point of view.

11,046. You are familiar, of course, with the findings of the Brussels International Conference of 1899 upon this subject?—I am afraid I am not sufficiently familiar to answer questions on it.

11,047. One of their recommendations was this: "that since a thorough knowledge of Venereology is one of the most important means of effectively combating the spread of disease, complete and compulsory courses of instruction in the subject, for all medical students, should be instituted in every university, so as to ensure the training of really competent practitioners." I understand you think that is not necessary?—I should deprecate making venereal disease a special and separate compulsory branch of the curriculum.

11,048. Would you kindly state why?—At present by the Act and by the general regulations and the recommendations issued by the General Medical Council, we are entitled to see that in every branch of medicine, surgery, and midwifery the student shows an adequate knowledge. If you begin to specify special branches, as I may say we are frequently urged to do—Ophthalmology comes up at one time, Laryngology comes up at another time. Tropical diseases have been similarly suggested. Then we have a representation that Infantile Hygiene should be insisted on. Some little time ago we were asked by a departmental committee whether we could not make Tuberculosis a special compulsory part of the curriculum, distinct from medicine, surgery, and midwifery. What we feel is, if we once begin to single out particular branches of that kind, the number of them would very soon be excessive, and the attention of the student, who has after all five or six years at the most to study the whole subject, would be diverted from the fundamental pathology, medicine, surgery, and midwifery to those special branches, and the assumption would necessarily be made that branches not specially mentioned were negligible. Now, nine-

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tenths of the practice of the medical man is in other branches than these specialities; and it is most essential in the public interest that he should be safe in the fundamental branches—the branches essential to sound general practice. I therefore feel, although it seems an easy thing to say “make venereal diseases compulsory,” that the net result would be less efficient medical men rather than more efficient. You might have premature specialists, but you would not have safe general practitioners.

11,049. In connection with this new cycle of inspection, I understand you to say it would be of some assistance to the Council, if this Royal Commission were disposed to recommend that instructions should be given to your inspectors to report in the case of each body on the measures which it prescribes to ensure that knowledge of these branches of education is duly acquired and sufficiently tested?—I think it would be received with very great sympathy by the Council, if the Royal Commission suggested that at the approaching cycle of inspection, special attention should be directed to the particular subjects which you have under consideration.

11,050. Do you think the licensing bodies would respond to any pressure brought by your inspectors to bear in that direction?—What I meant was this. I have for your information put a number of questions to the deans and other authorities of the medical schools, and they have given such answers as they thought proper. But if the Council were asked to instruct its inspector himself to inquire and report on what he actually found going on, then we should have information of an authoritative kind to lay before you and lay before the Government and before the public. These answers before you are answers of a general character, and represent the views of the leading authorities in these bodies. In the other case we should have information of our own on the matter.

11,051. The inspectors' reports would be of a more special character?—The Council, as such, would be able to answer any questions on the importance actually given to the subject from actual observation on what took place at the examinations.

11,052. Returning to the question of unqualified practice, I take it you recognise the services the Privy Council have performed in providing you with the material upon which your digest of the practice of foreign and colonial governments in the matter rested, and also in obtaining through the Local Government Board the data for that report on the practice of medicine and surgery by unqualified persons?—In both cases it would have been impossible for us to have got the information for the use of our committee, the public, and the profession, without the assistance of the Privy Council.

11,053. Do you think the production of these two documents has had anything to say in influencing public opinion on this question? Do you think it has prepared public opinion in any sense for more drastic legislation than we at present have on the subject?—The notices which I saw in newspapers and other places of the Blue Book, which was not a Medical Council publication but a Government publication, showed me that there was an uneasy consciousness on the part of these papers that improper advertisements were in this country propagated too easily.

11,054. Of course they felt as *particeps criminis* in this business?—I am sorry to say these notices very soon ceased to appear; and there is good reason for thinking that pressure was put on the newspapers to ignore the subject.

11,055. (Sir Malcolm Morris.) Might not that be the result of the House of Commons Committee on quack remedies?—That has not yet reported.

11,056. No, but the evidence that has been given before it?—That also has been treated with severe reticence by a great many of the papers.

11,057. Yes; but it has had an effect on the papers, to some extent?—Certainly.

(Sir Malcolm Morris.) It has put fear into them.

11,058. (Sir Almeric FitzRoy.) But, in your opinion, it is the obscurantism of the Legislature which is the main difficulty?—I did not use the word. My chief

experience was with a Committee of the House of Lords.

11,059. Your Council's Bill went through the House of Lords, I think?—A Committee of the House of Lords reported on it.

11,060. Favourably, did it not?—Unfavourably in the end, on the Dental Companies Bill, at least. It was practically useless after that.

11,061. (Sir Kenelm Digby.) With regard to the question about the duty of the doctor to warn the father of the bride against possible danger, do not you think if that practice was adopted or advised, it would expose the doctor to a very serious risk of an action of slander?—Certainly.

11,062. And an action of slander which it would be practically impossible to defend?—I do not know whether it is technically slander.

11,063. It is technically slander, at least it depends whether it is written or verbal; but it would be an action which would be exceedingly difficult to defend, would it not, because the doctor could never absolutely prove the truth of it? At least, it would be very difficult indeed?—The difficulty arises from this. The medical man has acquired the information in the course of his professional relations with one person, and has come thereby under what we consider an ethical obligation to keep the information to himself; but he gives it to another person with whom he has no professional relation.

11,064. Therefore there would be no legal privilege?—No.

11,065. He could not set up legal privilege?—No.

11,066. He can only set up the truth of his statement?—Good faith and so on.

11,067. Good faith would not do unless the statement was absolutely true?—I agree with you.

(Dr. Newsholme.) Would you mind asking the question, supposing the prospective bride was also a patient, would the case be any different?

11,068. (Sir Kenelm Digby.) It strikes me that is rather a difficult legal question. I should not like to answer it myself. I do not know whether you would. If the bride was also his patient, would that make any difference?—Yes, it does simplify the matter of course. Then he is bound to give her good advice with regard to her health.

11,069. He is bound to advise her to be careful?—With regard to her health—anything which might do harm to her health would come probably within that.

11,070. If she was concerned there would probably, I suppose—I am not sure about the law about the privilege as between him and the bride?—Yes.

11,071. But the case was put to you as to warning the father?—Exactly, with whom he had no professional relation.

11,072. That would make a great difference?—There are cases, I believe, on record where a doctor in perfectly good faith acting so has suffered at the hands of the ordinary law.

11,073. It would be an extremely difficult action to defend. There would be an issue raised as to whether there was privilege or not, which would be almost impossible to try?—I may say that every now and then, as President of the Medical Council, I get letters from perplexed doctors as to what they should do in such matters, and I have had to consult our legal adviser; and I am speaking now from impressions the legal adviser's advice has left on my mind.

11,074. I am putting it in favour of the wife at present; I will leave out other questions; but do you think there is any other alternative with regard to the protection of the wife against this danger? Do you think it might be a legal disqualification for marriage for a man to marry in an infective state?—You mean causing the marriage to be annulled?

11,075. Supposing you had a law to this effect? Supposing you said a man placed himself under legal liability and the man was prohibited from marrying if he knew himself to be in an infective state. I would not put a disqualification by saying the marriage should be annulled; but it should be a legal obligation upon him to defer his marriage until he could do it with

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reasonable safety?—I do not see how that would work out in practice.

11,076. Let us assume for a moment that there was such a law. I will put it in this way: that where a person had once contracted venereal disease he should not be allowed to marry unless and until he could get a certificate of what I will call, and has been called here, reasonable safety?—Speaking as a medical man, I should say it was highly desirable, but it would be utopian.

11,077. I quite see that; but one has, in this question, to consider all round if things can possibly be brought about. Are you aware of the existence of any law to that effect in any part of the world?—I have heard of proposals to that effect in some of the States of America.

11,078. You do not know whether they have been carried out yet?—No.

11,079. Let us go a step further. Supposing there was such a law, do you think it would be feasible and possible to get a reliable certificate of reasonable safety for practical purposes? Of course we are told you cannot get a certificate of absolute safety; but you may get a certificate of reasonable safety that a prudent man would act upon?—My impression would be that the word "reasonable" is so elastic, that a man who is determined to get such a certificate would have little difficulty by going from one doctor to another until he got it, and that perfectly conscientiously.

11,080. That leads me to a further point; could the medical authorities really lay down any rules or test of what reasonable safety would amount to? That is to say, if you get the history of the disease, the fact it had been contracted, the treatment the man had undergone, the lapse of time since the infection, the lapse of time during which he had not shown any signs of infection, supposing you had a series of rules, shall I call them, laid down, creating practically a standard of reasonable safety, might not that possibly assist carrying out some such law as that?—Yes; if it were decided that no person should give a certificate of reasonable safety unless the conditions A, B, C and D were all fulfilled and he testified as a matter of fact that they were fulfilled, then such a certificate would have some value.

11,081. I put it thus; that it should be a rule that no registered person should give such a certificate unless this standard was fulfilled?—If these were objective standards, then he could certify to them as matters of fact.

11,082. He would certify to them as matters of fact. He would say, "He has been free from the disease so long; he has been treated for the disease in such a way; there is reasonable ground to suppose he is safe." Is that practicable, do you think?—It is possible to make such rules and so on; but I doubt whether the working of them would prove to be a gain.

11,083. If you had a law of that sort, the very great danger would be that a number of practitioners would arise who would give certificates on very insufficient evidence?—That is why I said the certificates must be on matters of fact. Then you would probably get certificates which are accurate and sound, and not certificates of expression of opinion. Opinions, conscientious opinions, naturally vary, even on the same facts.

11,084. The man who gave the certificate would have to justify himself before the authorities of his profession that he had reasonable ground for doing so?—Yes; the Medical Council takes special cognisance of certificates granted which are false, misleading, or inaccurate.

11,085. If there was such a law, it would be strictly within the province and practice of the Medical Council to superintend its administration?—To punish those who break the regulations as to proper certificates. That is the only place where the Council would come in.

11,086. There might be a further question, which is a different question, whether it should be an offence against the ordinary law?—Yes; but might I add this

one observation? If a change in the law were made by statute releasing the practitioner from the liability to civil action for slander in warning an innocent person against the danger that might arise from infection, then I think an improvement would be made in the common law—if privilege were extended to such information.

11,087. It would be necessary to have some statutory provision to protect the doctor who acted in that way?—Yes, it would be a gain.

11,088. (Dr. Newsholme.) Did I quite hear you rightly that you would regard such a release from a possible action at law as an improvement in the civil law?—That is what I mean.

(Dr. Newsholme.) I was not quite sure I heard you rightly.

11,089. (Sir Kenelm Digby.) Still, it is necessary that the doctor should be protected by some actual change of the law?—Yes. At present he is under a civil penalty for what he does in good faith professionally.

11,090. One word with regard to unregistered practitioners. Is it your experience that they are much more prevalent in some parts of the country than others?—Yes.

11,091. In the north?—In the north, in some parts of London, and there are some curious pockets here and there.

11,092. (Dr. Newsholme.) Nottingham is one?—The Midlands, Nottingham, and Leicester, and in some parts of Wales.

11,093. (Sir Kenelm Digby.) Lancashire?—Yes, there is a little district there of which we every now and then hear; I think it is on the borders of Cheshire.

11,094. I think it is not quite true to say there is no liability in the law at present?—Yes, it is true, except in England, where there is an Act 100 years old, the Apothecaries Act, which enables the Apothecaries' Society of London to prosecute a person who provides medicine and treats medically at the same time.

11,095. I do not think it is quite that. It is a common informer. The Apothecaries' Company generally does act as common informer?—But it only applies to England, not to Scotland or Ireland.

11,096. It only applies to England, I think; but, still, it is an Act which is enforced occasionally?—Yes. The Apothecaries' Company has been very good. When a bad case has been brought before it, it has undertaken a prosecution.

11,097. I do not know what it is now; but when I was a county court judge we used to try actions under the Apothecaries Act?—I do not think there has been any action for several years. It is somewhat cumbrous.

11,098. It is cumbrous, I am not putting it forward as an effective remedy at all; but I only mean the principle was recognised and is still recognised by the law?—It is part of the law of England at present, that to practise as an apothecary without a licence is punishable.

11,099. Practice as apothecary would cover almost all practices?—No; I think he must dispense the medicine he himself prescribes.

11,100. Sell the medicine?—Yes; the two things go together.

11,101. Quite right?—The person who gave a prescription and did not dispense anything would not be liable.

11,102. With regard to the evidence, it is not very easy, but it is not at all impossible to get evidence of unregistered treatment?—No.

11,103. I have tried cases myself where patients have been sent in by the Apothecaries' Company to be treated?—Yes, I think the Apothecaries Act is not very difficult to work; but the cases are so numerous that adequate proceedings would be costly.

11,104. Still, the foundation of it is wrong. It is not a criminal offence; it is a penal action. 20*l.* goes to the informer. It is not satisfactory?—However, it is part of the law of England at the present moment.

11,105. Could we have a copy of the Bills which have been brought forward by the General Medical

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[Continued.]

Council?—You mean Bills for suppressing the practice by companies?

11,106. You spoke of Bills which were promoted unsuccessfully, and they came to nothing?—Yes. Dental and medical practice by companies, the removal of medical titles from persons who had been erased for infamous conduct, and so on. I have no doubt I could get copies.

11,107. I think it would be useful to us if you could get copies?—I will see that copies of all the Bills which, at the instance of the Medical Council, have been brought before either House of Parliament during the last 15 years are supplied to the Commission.

11,108. I should rather like to see them, I must confess?—I have no Bill dealing generally with the suppression of unqualified practice.

11,109. I do not know about the others then?—I merely instanced these to show that Medical Bills which proposed to increase the powers of the Medical Council as regards the restriction of unqualified practice were opposed at the instance of persons who sympathised with the other side, if I may say so.

(*Sir Kenelm Digby.*) I think we have in these notes already about that.

(*Chairman.*) Thank you very much.

The witness withdrew.

TWENTY-NINTH DAY.

Friday, 27th March 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mr. PHILIP SNOWDEN, M.P.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Sir VICTOR HORSLEY called and examined.

11,110. (*Chairman.*) You have given a considerable amount of attention to the subject of venereal diseases in the course of your long experience?—Yes.

11,111. You enumerate those diseases as soft chancre, gonorrhœa, and syphilis. You term them "primarily filth diseases." In what sense do you use that term?—Of course, we do not know the origin of pathogenetic microbes, but, as I believe, the majority have developed gradually by the infection of the human body with a microbe that has grown in filth, in dirt. I mean, it is a well-known thing that you can raise the virulence of an organism by passing it through animals; and it is quite conceivable, therefore, that originally these diseases were associated with unhygienic conditions, and arose under these circumstances. I put that point first because we find that the continuance of these diseases in the community goes with unhygienic conditions and essentially with filth conditions.

11,112. That does not mean that the disease can actually be generated?—*De novo*?

11,113. *De novo*?—No, certainly not.

11,114. It does mean that the microbe thrives in filth?—Yes, and under filthy conditions.

11,115. The microbe has never been discovered, has it, except in the body?—No.

11,116. You cannot produce it out of filth—cultivate it?—No.

11,117. You have to get it from the human body?—No. On the contrary in No. 2 I say the diseases persist by transference; and, in answer to your question, I mean that the organism must be transferred from human being to human being.

11,118. Apart from what we might call physiological conditions, does the condition of filthy surroundings make persons more liable to the disease or make the disease more virulent in them?—Yes, certainly. That has been the experience of every war. One of the

consequences of war always has been that syphilis has been worse in the community.

11,119. During the war?—Yes, and after a war. The fact has only come out after the war, of course. It was extremely marked after the Peninsular War. I think it is the experience of most of us that there was a great deal of syphilis after the Boer War even.

11,120. You mean that syphilis took a fresh start, as it were, in this country after the war?—Yes, I think that we saw more cases.

11,121. Of course, you are aware that syphilis is, unfortunately, prevalent amongst other than the poorest classes?—Yes, it is prevalent through every class.

11,122. And it is prevalent in cases where filth cannot be counted as a cause?—Quite so. I have not said that filth was a cause. I have said that these diseases (and I refer to all three), because if you take the first that I mention, soft chancre, soft chancre is, apparently, becoming rarer. There is another point about it which I have also put on my précis which is to be remembered in this connection, or perhaps I had better take it under No. 3, where I have put "probable fall in virulence." All these pathogenic organisms, which are only maintained in the community by reason of being transferred from one human being to another, are apparently falling in virulence, and have been falling in virulence for some time. May I point out to you that the Registrar-General's returns—such as they are—show that there is a fall in the death-rate from syphilis, for instance; that is undoubted.

11,123. That is only a fall in the diseases recorded under our rather imperfect system as being syphilis?—Exactly. I have only quoted it as a comparative fact, but as a comparative fact, I think it accords with all our practical knowledge of the disease, certainly for the last 25 or 30 years, that the virulence of the disease is not as great as it was. And I am

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[Continued.]

quite prepared to say that is true of gonorrhœa, and I am quite prepared to say it is true of soft chancre; because an associated infection of soft chancre is phagedæna. Phagedæna is only seen under the most filthy conditions as a rule. It is a spreading gangrene essentially, and spreading gangrene itself (due to the condition of the streets) in our general hospitals is much rarer than it was. Owing to better hygienic conditions, possibly to better feeding of the individual and better resistance of the individual, the organism is losing its virulence. When it attacks one human being it is weakened in the human being, and, therefore, it is weaker in infecting the next, and so on. That this is going on with all these human diseases is extremely well shown with scarlet fever. If you take the chart the Registrar-General published for the last 50 years on page 54 of his last Report, the virulence of scarlet fever has gone down markedly during 50 years; and what we were taught as students of malignant scarlet fever we do not understand now; we do not see it, yet it was undoubtedly common 40 years ago. If that is true of scarlet fever, it is true of all these human infective diseases. It certainly seems to me from the returns to be true of syphilis, gonorrhœa, and soft chancre, and I think the comparative absence or diminution of phagedæna is all in the same direction. I think it is due to better hygienic conditions of the people and I think to their being better fed.

11,124. Then you think we may accept it as a general law that all these bacteriological diseases are falling in virulence?—I think so—those bacteriological diseases in which the organism has to be transferred from living body to living body.

11,125. In the case of these diseases the transference is always from human being to human being?—Not always in the case of syphilis. In the case of syphilis, apparently, the spirochæte has a greater power of resistance than the gonococcus. The gonococcus, I should think everyone would agree, loses its virulence directly it is dried; but apparently syphilis, so long as there is any moisture present, will retain its virulence for a considerable time, and consequently innocent people can be infected from utensils and objects.

11,126. But there is no question of any intermediary in the transference of these diseases; they must be transferred from one individual to another?—No. A very good parallel is rabies, hydrophobia; that is the best we have, because the moment the rabic saliva falls on the pavement or the road and is dry, the virus is dead. It is doubtless an organism. Whatever it is, it must be handed from one living being to another. Gonorrhœa is very much on the same footing; because everyone who has worked with the artificial culture of gonorrhœa knows how the cultures differ in virulence, how quickly they lose their virulence. Therefore virulence partly depends on the resisting power of the individual on whom the disease is infected. If we increase the hygienic conditions of the people we increase their resistance to venereal disease.

11,127. But concurrently with a fall in virulence there may be an increase in prevalence?—As regards prevalence, I am very sorry to say I have no comparative facts. Of course, these diseases are extremely prevalent, but if you take syphilis, owing to the fact that syphilis attacks the nervous system by selection, I happen to have seen probably more in that way, and therefore I might be prejudiced into saying that syphilis was extremely prevalent; but that is my impression, that it is extremely prevalent.

11,128. In regard to these other manifestations of syphilis of which we now seem to be finding out more, is there any diminution in the seriousness of their effects?—Yes, I think there is a definite diminution in their seriousness. I was rather astonished to see in this last report of the Registrar-General no appreciable fall in aneurism. My experience in general hospital work is that aneurism is becoming a very rare disease.

11,129. That rather surprised us?—Yes; it is evidently not true judging from one's experience. Aneurism as a symptom of syphilis is, of course, a very important one, because its diminution means that syphilitic endarteritis is less severe now than it was;

and if that is true it points to a decrease of syphilis of the nervous system, so much of which depends on endarteritis.

11,130. There is no reason to hope, I suppose, that the disease, if left to itself, would eventually work itself out of the population?—No. That is a monstrous theory. It has been raised about all sorts of things, including alcohol. It is a most monstrous theory, because for every person who died of the disease there would be one hundred injured. It is a terrible philosophy, I think.

11,131. So that what you have told us as to the diminution of virulence is nothing whatever against the importance and gravity of the disease?—No. May I also say this on the question you asked me just now, namely, the diminution in the seriousness of the lesions produced by syphilis. I should like to point out that another thing besides aneurism which is of practical importance is the diminution, I believe, in the seriousness of syphilitic bone disease. I do not think that is due to the diminution in the virulence of the spirochæte; I think it is due to this, that people are getting cleaner, they are better fed and their resistance is better; and, therefore, they resist the secondary infections better. The old syphilitic ulceration of bone, caries of bone, began first with local syphilitic mischief in the bone itself that led to a breaking of the skin over it by inflammation, that led to the part getting infected with another organism altogether, a staphylococcus, for instance. Staphylococcus secondary infection of a wound is even a more difficult thing to extirpate sometimes than the original syphilitic or tuberculous lesion which caused the injury to the bone. Now, thanks to Lord Lister of course, we are gradually weeding out those secondary infections, and I think a great deal of this diminution of syphilitic disease of the bone is due to the diminution of these secondary infections.

11,132. I suppose there is no reason to think that a syphilised population would in time tend to become immune?—I think there is; but I think it is a far better thing to get rid of the disease altogether.

11,133. Most people would agree with that. Now coming to the question of statistics?—As regards the distribution of venereal disease first, that is, of course, an enormously important question.

11,134. A very important question?—But unfortunately, here again we have nothing really to go upon. There are two points on distribution I have to refer to; one is the distribution of the disease in a body and the distribution in the kingdom at large. As regards the distribution in the body I need not waste your time with that; it has been laid before you; I mean, the greater prevalence in the nervous system and so on. To come to the distribution in the kingdom, most of these sociological diseases of course are imported into the kingdom; for instance, smallpox. We therefore naturally would wish to have in our national statistics some indication of the distribution of the disease in the country. Dr. Newsholme could no doubt clear up a point, which certainly confuses me very much, in the Registrar-General's returns, because when we come to the areas although an immense advance has been made in our national statistics by the co-operation of Somerset House and the Local Government Board in adopting administrative areas instead of the old registration areas, when you come to look at these areas you find that the whole of the facts relating to them are grouped under a heading, "Causes of Death," and when you look down that list you do not find venereal diseases anywhere.

11,135. (Dr. Arthur Newsholme.) Do you mind giving me the reference to this?—It is pages 313 to 536. This is due to the adoption of what has been called the short list. Dr. Stevenson very kindly sent me a copy of his manual, but I could not ascertain from that on what ground this short list was constructed at all. For instance, No. 2 disease is smallpox; only about five or six people die from smallpox now in the whole year in the whole kingdom; it is a matter of no statistical importance at all. It is a matter of importance as far as the introduction of the disease into the country goes, and if the areas showed

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us that the seaports were the places where smallpox comes in that would be another thing. But I think it is a terrible thing for the country that the national statistics are not giving us the incidence of syphilis and gonorrhœa. They do give us alcoholism. That is there; and of course, as I show further on, the drink trade and syphilis are so absolutely associated. This short list is a very extraordinary list of diseases; for instance there is nothing about the nervous system except meningitis, and so on. I do not understand on what footing it was drawn up at all.

11,136. (*Chairman.*) You think that short list ought to be revised?—Entirely.

11,137. And completely?—Yes, completely. I daresay it is a question of expense. It may be there are a great many considerations.

11,138. Is it the case that that short list was only adopted a very short time ago?—I cannot say when it was adopted.

11,139. (*Dr. Arthur Newsholme.*) Within the last two years?—Yes, I believe it was a short time ago. What I mean to say is, it renders our national statistics hopelessly futile. There are no doubt reasons why it should have been adopted; but I am only pointing out that it paralyses us altogether in any sociological movement we may take from a national health point of view.

11,140. (*Chairman.*) From the other statistics that are given in that volume, a certain amount of geographical distribution is possible, is it not?—I do not know where. The infantile age question is, of course, extremely good; the sex question, of course, is also worked out very fully indeed.

11,141. Coming to statistics generally, you consider that the Registrar-General's Office wants to be reformed?—Yes. Here I should like to say this; that this matter has, within my knowledge, been repeatedly considered by the British Medical Association as representing the medical profession, and we have always held that this department of national statistics should be under the absolute head of someone who has had a medical training. We have always objected to anyone having the supreme control who had not a medical training. Then of more recent years, of course, it has been brought before the Association that all these questions should be co-ordinated and grouped under a Ministry of Public Health. It is impossible to give evidence before a Commission like this unless one deals with fundamental reforms. Therefore I put upon my précis "Reform of the General Register Office" as a public need of primary importance. It would become, of course, a department of vital statistics under a Ministry of Public Health.

11,142. Would that Ministry of Public Health take over all medical duties which are at present associated with several other departments?—Yes.

11,143. And collect them all under one roof?—Yes.

11,144. And take them away from the Local Government Board and other departments?—Yes; it would mean re-coordination. May I point out that a great deal is said now about a State medical service. Unless you had previously established a Ministry of Public Health I think it would be perfectly impossible to carry out a State medical service, however much we may agree with the idea.

11,145. You think the two things depend upon each other?—Yes. I think the two things hang together. Then my second point is the question of the notification of births. That is the next most fundamental point, and of course I wish to urge that it should be made absolutely compulsory all over the country. If it is made compulsory, then if the Act had to be amended (it might not have to be amended) for particular areas, opportunity might be taken in order to make the Act compulsory on medical practitioners and midwives with adequate remuneration for their services. This was a point which the British Medical Association brought up originally, but it was rejected in the House of Commons, partly I think under a misunderstanding, and has given great trouble in the administration of the Act.

11,146. Then you wish to make the Act compulsory on all medical practitioners and midwives?—With adequate remuneration for their services.

11,147. With some penal consequences if they do not make the return, I suppose?—Yes; the medical profession has never objected to that if they were paid for their services.

11,148. Now we come to the certification of stillbirths, a very important point?—Of course, making the notification of births compulsory leads the way to the notification of stillbirths. Here again the British Medical Association moved in this matter in 1904, that is 10 years ago, and urged upon the Registrar-General in a deputation that there should be this registration of stillbirths, and, of course, the next point, the secret certification of death. On the certification of stillbirths, may I point out that the British Medical Association also urged that in every coroner's district (that was the area we took then, but it does not matter what the administrative area is) there should be an officer appointed very much like the similar officer in France, whose duty it should be to make such post-mortem examinations as might be necessary to determine the exact causes of death. That proposition of the British Medical Association had relation not merely to ordinary deaths, but, above all, to the examination of stillborn children. If that had been accepted this Commission would have been in possession of really essential material relating to antenatal conditions revealing the exact prevalence of syphilis. I need hardly say that no notice was taken of our deputation. Therefore the question of stillbirths seems to me in many people's mind to be still merely a question of the discovery or non-discovery of crime. The British Medical Association has looked upon it as a much larger question than that. Above all, we hoped and still hope that this arrangement will be carried out since thereby we shall discover antenatal conditions, not merely syphilis, but other pathological states, especially those dependent on unhygienic conditions and on the state of nutrition of the community in whatever part of the country we are dealing with.

11,149. But is it not a fact that the notification of stillbirths is carried out for a part of the population now?—Only through the midwives.

(*Chairman.*) Only through the midwives. Is that so?

11,150. (*Dr. Newsholme.*) No, excuse me. To 60 per cent. of the population the Notification of Births Act has been applied and is compulsory. I might correct another point, that where the Notification of Births Act is in force (that is for 60 per cent. of the total population of this country) there is also compulsory notification of stillbirths after the twenty-eighth week of pregnancy?—Yes; but is that of cases attended by a doctor?

11,151. A doctor or midwife. I do not say the doctors do their duty in notifying it?—I do not think the doctors know of it in the vast majority of cases.

11,152. Yes, they do?—Of course I am corrected, naturally; but the prevalent idea in the profession is that the responsibility is in cases attended by midwives rather than by medical men.

(*Sir Kenelm Digby.*) It is compulsory on the doctor in places where it is compulsory on the others.

(*Dr. Newsholme.*) Where it is adopted. If you refer to my report on Infantile Mortality, you will find a lot of facts about it there. As a matter of fact about 3 per cent. of the total births are probably stillbirths?—Quite so.

11,153. And that includes quite a lot of doctors' cases as well as midwives' cases?—I do not think I have made my point clear. My point is at the present moment the cases attended by doctors which are stillbirths as a rule are not notified.

(*Dr. Arthur Newsholme.*) If they are not notified in these areas comprising 60 per cent. of the total population of the country, then the doctor is breaking the law.

11,154. (*Chairman.*) In any case what you wish is, that the notification of stillbirths should be applied to the whole of the country and be rigidly enforced?—

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Yes, certainly, that is what the Association asked for before, and for the reasons I stated, not merely from a criminal point of view at all, but for the discovery of antenatal conditions.

11,155. Do you think the notification after the 28th week of pregnancy suffices?—No, not notification only. Our original standpoint was that of course there should be the possibility of autopsy; so that it would not suffice.

11,156. Then you also would like to have notification of abortions, I take it?—Certainly. The 28th week of pregnancy was advised by the British Medical Association, because in practice it would be impossible to obtain notification of abortions at present.

11,157. Your main object being that we should have more knowledge as to antenatal conditions than we now possess?—Yes; that the national statistics should be complete from the point of view really of pregnancy.

11,158. Now, as to certification of deaths, you wish for a reform of the present methods?—Yes, we must have a reform. We ought to have had it long ago. The British Medical Association asked for it in 1904. If we had had it then this volume of the Registrar-General would have had real scientific value; because of course you cannot expect a practitioner to put down on a document which is not confidential facts which may react unfavourably sociologically on his patient's friends, and he does not do it.

11,159. How would you get over that difficulty?—What we proposed originally was, that the medical practitioner should transmit direct to the registrar a certificate in a sealed envelope. The certificate should be a confidential document subject to the discretion of the Registrar-General. May I say at once that we moved thus in 1904, but the Swiss Government had moved years before that, and as the Swiss system it seems to me really cannot be improved upon, perhaps I might lay it before the Commission.

11,160. Yes?—This is the instruction: the physician attending the case, in order that exact answers of all medical and hygienic questions involved, shall first tear off the upper part of the registration card containing the name of the deceased. May I say that their nomenclature of causes of death seems to me to be infinitely better than the international list, and very superior to our unscientific and erroneous "Nomenclature of Diseases." It makes the task of the doctor easier. I have copies of the certificates of death here, one for men, and one for women, and one for stillborn children; all three of them are in different colours, and so they are easily handled. These certificates consist of two parts, perforated; the top part simply contains the name of the individual and the number of the certificate. The rest of the certificate contains, not only the so-called primary and secondary causes of death—that is gone into in the instructions as well as in the manuals and so on, and I need not waste your time with it—not only those pathological points, but as a matter of fact also a good many sociological conditions in regard to the house, whether a one-roomed tenement and so on, and several sociological points of great value in connection with the cause of death, of course for the public health authorities. A great contrast, may I say, to our miserable certificate of death. What happens then is that the practitioner tears off this top piece—containing the name of the patient—and puts that piece into this envelope (blue), addressed to the registrar; of course, on the view that it is only of importance to the community that the name of the person who is dead should be known locally. Of course it is of no importance to the people in his locality what the person died of. That is for the state and the public health authorities. So the practitioner takes the lower part, containing the facts, *e.g.*, cause of death, &c., puts that into this envelope (yellow), which is sent as a matter of fact to the registrar, who immediately puts it into this envelope (white), and sends it to the central government. So that you have all the distribution of these facts handled, it seems to me, in the simplest way.

11,161. Does the name of the individual who might be saddled with the stigma of having died from one of these diseases go to the central office?—No.

11,162. It never goes there at all?—No. Of course, from a criminal point of view it could be traced by working backwards, because the address is given.

11,163. But as far as the family is concerned, it has no reasonable grievance?—No, it is absolutely protected. It seems to me a most admirable system. It is really what we suggested to the Registrar-General in 1904 essentially; but it is better than ours, I think, altogether.

11,164. But these rather elaborate returns would throw a great deal of work upon the doctors, would not they?—Yes; but they pay the doctor for the certificate. It is a miserable payment, but they do pay him a little fee for the filling up of the certificate.

11,165. If we went in that direction, a fee would be essential?—Certainly; and the British Medical Association, in the year 1905, proposed that 2s. 6d. fee should be given to the doctor. That included his seeing the body again, thus putting another visit upon him as well as the filling up of the certificate. But I think for that 2s. 6d. the doctor certainly would gladly fill up this Swiss certificate, because he would realise that he was sharing in an enormously important work for the public health statistics of the nation.

11,166. (*Sir Malcolm Morris.*) That would mean a compulsory visit to the body before any certificate were given?—Yes, that is what we settled in 1904.

11,167. (*Sir Almeric FitzRoy.*) What is the present fee?—Nothing. The argument always brought against us was one of expense.

11,168. (*Chairman.*) If that system were adopted here, would it bring to light the full effects of venereal diseases among the deaths of the population?—Undoubtedly. I cannot give you any precise information on venereal disease, because one would have to go to Switzerland to get the facts, and I have not been since I got these documents; but I can tell you it certainly would be the fact, because I do know the facts with regard to the discovery of alcohol. In one year in the deaths of men under 20 there was a rise in the mention of alcohol of 10 per cent., and at Chaux-de-Fonds, which is the great centre of the clock-making industry, it was 25 per cent.; that is to say, the increased mention of alcohol on the death certificate as a contributory or primary cause of death. So that as alcohol—which of course is the other point which is usually concealed by the practitioner—meets with that specific revelation under these circumstances, it is quite obvious that syphilis and gonorrhoea also would be named as soon as the doctor knew that secrecy was protected.

11,169. There would be no reluctance whatever on the part of the doctor to certify those diseases under such a system as that?—None whatever. He would give a full and genuine certificate.

11,170. Which must bring to light the prevalence of these diseases?—Yes.

11,171. Turning to the question which you have headed "Prevention" I am afraid this Commission is not competent to deal with the drink trade in any way, or with the question of prostitution; but I would like you to give your opinion as to the effect of alcohol in aggravating venereal diseases?—But may I point out that surely the Commission, I take it, is to represent to the community what are the causes which bring about the spread of the disease. And the question of infection with a venereal disease is so directly dependent on the use of alcohol by the community and the drink trade.

11,172. That is most certain and we have had evidence on that point. We all know that the infection must largely be incurred under the influence of alcohol. But the point I should like to ask you about is the effect of alcohol on the aggravation of the disease itself?—Undoubtedly alcohol aggravates the disease by diminishing the resistance of the individual, as it does with all infective diseases. This has been specially drawn attention to in relation to the later manifestations of syphilis of the nervous system such as general paralysis of the insane, and, as prostitution is directly

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associated with the drink trade and the drink trade is responsible for a great deal of prostitution, it follows that the people who are disseminating the disease have their own personal resistance to it greatly diminished.

11,173. Then the effect of alcohol is not only to render people much more liable to incur the disease, but to render them much less able to resist it if they do incur it?—Yes, that is so.

11,174. There is no doubt about that?—Quite.

11,175. In regard to all these three diseases?—Yes, certainly, all three.

11,176. And therefore any diminution of the alcoholic tendencies of the people might be counted upon to help to produce a less prevalence of venereal diseases?—Yes, a very great deal. On that point may I draw attention to the Registrar-General's returns as interesting back confirmation of all this. That is if you turn to Table 28 on page 72, syphilis is included in the column of causes of death of the table dealing with infant mortality by sex, age, cause, and legitimacy; and the syphilitic mortality of the illegitimate infants is eight times that of the legitimate.

11,177. That we know?—I beg your pardon. Illegitimacy of course is notoriously connected with the drink trade and the drink habit among people; so that it brings it about in the other way.

11,178. I am afraid we cannot take cognisance of the important question of the reform of wage earning or housing?—No, I put down those two points; but I am afraid you must, if you will allow me to point it out that you must take cognisance of them in this sense;—

11,179. I would not say cognisance, but we cannot investigate them?—No, I was not proposing that for a moment; but you must take cognisance of them in this way, that if you want to prevent the spread of syphilis and the other venereal diseases you must suggest measures which will diminish prostitution and the diminution of prostitution certainly will be helped by raising the wage-earning capacity of the people. It is not merely a theoretical point, but the chief of the Statistical Department in Norway, Dr. Rygg, has investigated the relationship of prostitution and wage-earning and has shown, what is known to us of course here, that the large majority of people who descend to prostitution are those who are earning the smallest wages.

11,180. (*Mr. Philip Snowden.*) You are referring to women only, of course?—Yes. Then as regards housing, I put that in because also there again as regards causation of prostitution and illegitimacy, overcrowding is so important that I hope the Commission will report upon that.

11,181. (*Chairman.*) That is a most important question, but, as you know, it is quite impossible for us to investigate the housing question?—No, not investigate the housing question; but the bearing of the housing question on immorality and disease is so well recognised.

11,182. But the Commission would naturally feel reluctant to express opinions without investigation?—As regards cleanliness, I am really only concerned in this matter from a public health point of view. I did not come here from any other point of view; and on the ground of the public health I should like to point out that cleanliness, and provisions by the local authorities where necessary for cleanliness, is fundamental in the prevention of venereal disease. Coming back to my original first point on the précis regarding these diseases as primarily filthy diseases arising under filthy conditions I hope the Commission will refer to that point at any rate.

11,183. You think that increased cleanliness amongst the people will by itself produce diminution of the disease?—Yes, I am sure it will. Of course the people are cleaner—that is admitted. To that I attribute the diminution of phagedæna.

11,184. (*Canon Horsley.*) You mean especially the provision of public baths?—Yes, I do; and also if a municipality is erecting dwelling-houses for the working classes, the provision of hot water to the top of the building, and so on; the social hygienic reforms proposed by the French Progressive Party.

11,185. (*Chairman.*) What are your views as to the instruction of the public with regard to these diseases?—I think that also is an extremely important point. In the first place, as regards children, I think children should be instructed in sex matters. I have assisted at various discussions on this subject between education authorities and social workers, and I am aware of the difficulties of such instruction being given by the teacher. I suppose the general feeling of the teaching profession at the present moment is that they cannot do it. I believe myself if the elementary education of the country were entirely altered, physical science recognised not as a "subject" in the code but as a mode of mental education, the nature study part of that education really extended, and every child taught the groundwork of hygiene, the health of the body, the instruction in health matters could be gradually brought into the mind of the child without injury.

11,186. At primary school ages?—The hygienic instruction at the present moment is in a chaotic condition; but actual direct physiological hygiene is not commenced until the child is about 12 or 13, just before the leaving age.

11,187. Then after that age in the secondary schools, or if the children do not go to secondary schools, do you think there should be any kind of public instruction giving the necessary knowledge and warning?—I have not made up my mind at all as to what should happen after the children have left school. As regards the secondary schools, I certainly think the heads of the secondary schools should instruct the children. I mean, I do not think it should be entirely left to the parents. I may say again, as far as I am aware, the teachers are of the opposite opinion. The teachers are of the opinion that the parents should do it at the first. A teacher could very soon find out whether a child had been so instructed by a parent, and if it had not been, he could supplement the instruction.

11,188. Do you think this sort of instruction should be given in public schools and universities?—It would not be necessary in the universities if a child had already learnt it in a school.

11,189. I thought you only proposed to give the barest outline to a child in a school?—But they do not proceed to the universities until they are 18 years of age, and in the secondary schools they ought to receive full instruction.

11,190. But do you think this sort of teaching can be given by laymen, or should it be in the hands of the doctors?—I think it should be in the hands of laymen.

11,191. You would not confine it to the medical profession?—No; it ought to be regarded as a simple feature of normal physiology, and if you had it given by medical men it would be regarded as part of a medical mystery.

11,192. Do you think teachers generally would require special instruction themselves before they would be qualified to give this kind of teaching?—I do not quite understand; do you mean physiologically?

11,193. Yes?—I quite agree that a great many of our teachers are not properly taught, unfortunately. I suppose very few of the teachers in public schools, whether elementary or secondary, are scientific or have been scientifically educated, and, unfortunately, physiology, instead of being looked upon as a means of adequate education, is looked upon as some special subject by itself. Every child ought to be taught physiology.

11,194. Of course, there is rather a line to be drawn, is there not, between ordinary physiology teaching and a kind of teaching which would be of the nature of a warning of the very serious effects of these diseases. Ordinary physiological facts, the facts of birth and so on, are very different from the pathology of these diseases?—Yes, these are pathological and not physiological. I was speaking then of the development of the physiological sex ideas in the child's mind. What you ask me now is, what instruction should be given in relation to the existence of venereal disease?

11,195. Yes?—As far as my personal view is concerned, I have never thought of giving such from a public point of view. I think the parents should

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privately inform the children on that subject; but I do not see at all why the teacher should not do it too. I do not see any objection to the teacher doing it as well.

11,196. Assuming the teacher had the knowledge?—Yes.

11,197. It is certain that a vast number of our teachers have not anything like the knowledge necessary?—Quite so.

11,198. They do not know the gravity of the subject in the least, at present?—No.

11,199. And they would require a certain amount of teaching themselves, would they not?—Yes. That brings it, does it not, to the next point, the instruction of adults?

11,200. Yes?—Here, again, I have never been able to understand why there should be any mystery about this matter. I think it has been a great national injury. I think this book of Miss Christabel Pankhurst's, "The Great Scourge," is doing an immense amount of good, and I think it is going to do a great deal more good. I could never understand why, except from the point of view of professional confidence, which is only individual, the medical profession should have joined with the public in concealing the existence of these evils. This book is written by a person of non-medical education and she has succeeded in writing the book without vulgarism. It is an immensely valuable book to be published.

11,201-3. (*Chairman.*) Are there not a great many distortions of medical facts in that book?—I have not seen them. I have been asked with regard to one point which I may refer to, namely, the percentage of those persons who resort to fornication who get infected with gonorrhœa. Here again we have no public health figures, no scientific data to go upon, but I should have said it was not over-estimated in this book. May I point out this. It was quite recently drawn to my notice that the working of the Insurance Act—and, of course, the Insurance Act brings an enormous number of valuable points to our notice as regards the health of our nation which we should not have dreamt of—is bringing about not only the better treatment of venereal disease generally, but it is bringing about better knowledge of the prevalence of gonorrhœa. The practitioners on the panel tell one that women come to them now for treatment who never came before. Undoubtedly the great danger of clandestine prostitution will be greatly mitigated by the working of the Insurance Act.

11,204. That we hope?—But as regards this instruction of the public, there is this other book on this public question, called "Under the Surface," which is written by a medical practitioner, Dr. Martindale, which shows that the Indian Government is supporting the White Slave Traffic. It is a book which was violently and fiercely attacked by the Marquis of Tullibardine in the House of Commons. That book is now being greatly circulated among the public, and I think it will do an immense amount of good.

11,205. Do you think that a style of book which can hardly be called scientific is the kind of book which should be placed in the hands of young men and young women?—Certainly I do, and I do not know why you do not call it scientific.

(*Dr. Newsholme.*) I do not know that book.

11,206. (*Chairman.*) No, I have not seen it?—I will put it in then. It is called "Under the Surface." It is sold by the National Union of Women's Suffrage Societies, the honoured head of whom is Mrs. Henry Fawcett.

11,207. (*Mr. Philip Snowden.*) I think you are not correct there. I am quite familiar with everything that took place in the House of Commons at the time Lord Tullibardine raised it, and the National Union issued a statement that they were in no way responsible for the publication of the book; that the only thing they did was to stock it in order to provide people with it if it were asked for?—Yes, I am perfectly well aware of that. I did not say they published it.

11,208. I understood you to say it was issued under their authority?—Yes, I say it is issued under their support because they stock it, and you can go there

and get it. That was Lord Tullibardine's point. He thought they published it as well.

11,209. (*Mrs. Creighton.*) I think I may say as regards that book, having read it, that most people would keep it on quite a different plane to Miss Pankhurst's book. It is written by a doctor, and it is a statement of facts without so much preaching and other gospel alongside. You would agree with that?—Yes.

11,210. (*Mrs. Creighton.*) I should have thought it was the more valuable book of the two?—I am not comparing the two books at all. They are both very useful. In my opinion Dr. Martindale's book is a perfectly scientific book; there is nothing unscientific in it. It is a statement of medical and social facts.

11,211. (*Chairman.*) It is no doubt a book that the Commission should see?—I think so certainly.

11,212. Anyhow, you agree that the form in which this instruction is given is very important?—Yes, and my point was that I thought the public ought to be instructed.

11,213. But I mean the kind of way in which it is put before the public is very important?—Very important.

11,214. If it is not done in the right way, it may simply give rise to prurient curiosity, which we wish to avoid?—Yes; but my point is, that if you inform people you destroy curiosity; I think you destroy prurient curiosity by really informing them of the facts.

11,215. With regard to the recent Commission on the Divorce Law, I am afraid this Commission cannot recommend any further changes in that important law?—No; but I wish to draw the attention of the Commission to the fact that the report of the Commission on the reform of the Divorce Law is governed in certain important particulars by the existence and prevalence of these diseases; and when you come to the question which was raised before the Commission, the question of cruelty, the public are not aware, and I think the Commission should make the public informed on the point, of the prevalence of gonorrhœal infection, and the frequency with which it is transmitted from husband to wife. I really put this in because it is fundamental to my next point, the privilege of the medical profession against the law of libel in matters of public health. The medical profession are constantly in this difficulty, due in the first place to public ignorance, which we hope will be remedied, as I stated just now, and secondly their own very proper code of etiquette, namely, the respect of professional confidence. They are perfectly aware of innocent persons suffering terribly from evils unspeakable, which they might shelter them from. That is their difficulty, in plain language. The British Medical Association has often discussed this subject in various ways; and the most fundamental point that occurred to the Association was the one that I have put in my précis, and a very celebrated case in the courts 20 years ago brought this matter to a head. It is perfectly obvious that from the public health point of view a medical practitioner ought to be at liberty to warn somebody who to his knowledge was likely to be infected with the disease.

11,216. Under the present state of the law he renders himself liable to an action?—Yes, to a libel action, and he would be ruined undoubtedly.

11,217. What alteration do you propose in the present law of libel to free him from these liabilities?—I knew you would ask me that, because it is a natural consequence of what I have just said; but as I am not a lawyer I cannot answer that question. But may I point out that the difficulty is very great. A short time ago a physician published in the "British Medical Journal" this statement in a lecture, that he attended a lady and found this poor thing completely crippled by what he recognised to be gonorrhœal rheumatism. She was a young woman. He went on to say, "The patient's mother asked me a number of very pointed questions which I had the very greatest difficulty in getting rid of." That was his mode of expression. From a civic point of view, he ought not to have been put into that position.

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11,218. Then the amendment of the law in whatever form the lawyers would put it, would be to enable a doctor to say exactly what he thought was the cause of a particular disease?—Yes.

11,219. Subject, of course, to his own possible error of diagnosis?—Yes.

11,220. To the best of his ability?—Yes.

11,221. You would make him free to do that?—Yes.

11,222. Free to do it to anyone, or only to relations who had some right to demand it?—No, only to people who had a right to demand it.

11,223. The relations?—Yes, the relations or the patient's next friend; really the nearest relation.

11,224. What is your opinion of the view of the medical profession with regard to changes of that kind? Would they wish to be relieved in this way, or would they rather the law stood as it is now?—When I was president of the Medical Defence Union, we had two cases before us in which a doctor had communicated indirectly the existence of danger of infection to the mistress of a servant, and under, of course, the pressure of circumstances. Naturally, if he had been protected by the law he would have been very glad. If you were to lay the question before a medical gathering at the present time, their first idea of course would be, "It is a breach of professional confidence; we cannot alter that." The first move in this must come from the community. The community must say what they want, in order to obtain protection. I think you cannot expect the medical profession to take the first move in the matter, because it has nothing to do with their interests; it is simply the interests of the community.

11,225. And you think that if this relief from the present law of libel were provided, it would tend to prevent marriages which ought not to be carried out?—I am sure it would—very greatly.

11,226. You would not propose to introduce any restriction on marriage of anyone who was infected with one of these diseases?—I raise that point in the special points under congenital syphilis. I bring it up there.

11,227. Of course the adequacy of treatment is a very important point?—Yes.

11,228. And to bring the treatment to bear as quickly and as widely as possible?—Yes.

11,229. I see you sum that up under five heads?—Yes.

11,230. First, will you tell us what part the Poor Law takes?—In the first place I do not know whether the Commission are proposing to make an inquiry into the treatment. What I suggest is, that the Report of the British Medical Association, 1905, and the Report of the Poor Law Commission, 1909, shows quite clearly that the present treatment of Poor Law patients is extremely bad.

11,231. We have taken a good deal of evidence on that point, and as far as we can see the present system is not adequate?—That is my point. In connection with that, may I point out that I think there could be a considerable economy in administration, because, for the Poor Law patient of course, one wants bacteriological examination made, and then under National Insurance, we want bacteriological examination made for the insured person. As far as I am aware, under the Insurance Act, the only metropolitan authority that is acting in this matter is Kensington. I understand that Kensington has placed its laboratory at the service of the Insurance Committee. As far as that goes, it seems to me to be a most welcome move on the part of the local authority. We should take that as an example; that a public health laboratory should be at the disposal of the Poor Law medical officers and the National Insurance medical officers.

11,232. (Sir Malcolm Morris.) May I ask one question, my Lord. How is it being carried out at the present moment as far as National Insurance is concerned?—I meant as regards bacteriological diagnosis.

11,233. Yes; how is it carried out to-day, except at Kensington?—Not at all, or it is done privately and

through the laboratories of general hospitals. There may be other public bodies coming into line, but I do not know.

11,234. (Chairman.) You think the Poor Law infirmaries ought to be equipped so as to give full treatment to these diseases?—Yes, certainly.

11,235. And they should rely on some other body for such laboratory examinations as might be necessary?—Yes, as part of the public health work of the district.

11,236. In fact, we want a large spread of research laboratories all over the country, to deal with these things?—Yes.

11,237. What is your view about special hospitals?—Do you think they ought to be multiplied or be left alone?—My feeling is that I think they ought to be left alone. They are in a very unfortunate position of course; the public do not support them as they ought to, and I think the State ought to support them. It seems hopeless to get it by voluntary effort. If the community does not recognise its duty in that, the State should.

11,238. Do you think the line of action is rather to divide special hospitals or to give the treatment in other hospitals to a much greater extent than now?—My feeling is towards treatment in general hospitals in special wards.

11,239. You prefer that?—I prefer that on the whole.

11,240. But you think a great deal more accommodation in general hospitals is required?—Certainly.

11,241. As regards private practice, I suppose the private practitioner also wants easy access to the bacteriological laboratory?—Yes, I mentioned private practice because there is a margin of private practice in which the patient is not at all well off, and they ought to have access to the municipal laboratory as well as the poorest people, it seems to me. Of course the municipality must protect itself against abuse.

11,242. I think you said just now that under the National Insurance Act you think a great deal more of this disease will be brought to light than people thought existed?—It is being brought to light, I know.

11,243. But is it being treated?—Yes, it is being treated, and being treated for the first time. Of course under the Insurance Act a large number of poor people are being treated who were not being treated before at all. They were not treated at all, and never saw a medical man.

11,244. The panel doctors, many of whom would not know very much of this treatment, would in all cases advise the sufferer to go somewhere where he could get treatment?—Yes; but if you will allow me to say so, I do not think the panel doctor is as ignorant as that. I think the panel doctor is quite capable of treating these patients.

11,245. But we have had a good deal of opinion that the panel doctor as a rule would certainly not be able to give salvarsan treatment, which might be most important?—I think he would not do it intravenously; but there is a great deal of intramuscular salvarsan treatment now, and it will become simplified. I think the difficulties of the salvarsan treatment are only temporary. You see that has always been the case with every new treatment, has it not?

11,246. Then one effect of the National Insurance Act will be to create a much greater need for treatment?—Yes.

11,247. It will bring the cases to light, and then the need will prove itself?—Yes.

11,248. Whereas now they are not treated at all?—No.

11,249. Now I come to your special points on congenital syphilis. Have you great experience of that?—Yes. You asked me a question earlier whether there should be restriction of hereditary transmission.

11,250. Yes?—I have thought of that a great deal. I do not see how it is to be done legislatively at all. I think it could only be brought about by the general public instruction brought about by the Report of this Commission. The point I want to lay before the Commission is that that Report should in no wise

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support the prevalent idea that two years is adequate for the treatment. I think that idea, which arose about 40 years ago, has had disastrous effects. Of course it is one of those difficult scientific points, where you cannot say absolutely when a person has ceased to be infective. But everyone will agree there are plenty of clinical cases in which people are infective even four years after. If any legislation was introduced, naturally a time limit would be asked for. I do not know how it is to be furnished accurately.

11,251. As a test of freedom from disease, would you accept the Wassermann reaction?—No. I would go this far, that the probability of non-infectivity is of course greater when you have the absence of a Wassermann reaction. I would go that far.

11,252. But a negative test would not satisfy you that the disease was not present?—No, certainly not.

11,253. Then you require as a guarantee of non-infection a series of tests being all negative over a considerable time?—Yes; if we were to rely on that method. From a practical point of view, I think you would really be driven back to an arbitrary time limit. I mean the community would say, "We are content to accept five years." Scientifically it cannot be done yet; but that something should be done, and at any rate some expression of opinion should come from this Commission, I feel very strongly upon.

11,254. As to the dangers of accepting two years as a safe limit?—Yes; it is not in the least degree safe.

11,255. Your experience is entirely against that?—Yes, entirely.

11,256. And you would not even like to put it certainly five years, I suppose?—No.

11,257. You said five?—I only threw out five as a suggestion.

11,258. (Mr. Arthur Newsholme.) Is your experience as to two years based on the cases which were well treated in your view?—Yes. There again, as to "well treated," we know perfectly well that a man who had an enormous practice in this sort of disease was in the habit of giving extremely small doses of mercury. But most of us take a different view nowadays. So that when one talks about patients being well treated, there you have a difference of opinion. I think the general opinion in the profession now would be that large doses of mercury (in addition to salvarsan) are necessary for a considerable time.

11,259. (Chairman.) Legislation apart, and of course there might be extreme difficulty in regulating marriage on any of these principles, you still think if there were much greater knowledge among the community of the dangers of these diseases in regard to their heredity transmission, marriage would be entered into with more care and thought than it is now?—Yes; that is why I think the literature I have put in is going to be so extremely useful. I have known a man, in defiance of my opinion, get married because he could not face the social stigma of his immediate marriage being broken off. He actually entered into marriage knowing he was horribly infected himself, simply from a social point of view. If people are so brutal as that, you can only hope to meet it by education, by instruction. If the parents of the lady had been properly instructed, they could really have guessed at what was going on perfectly well, or made proper enquiry.

11,260. Then you regard congenital syphilis as a very material cause of national physical deterioration?—Yes. I brought that question before the Departmental committee appointed by the House of Commons (see Report), and I see nothing to vary my opinion. As far as my practical experience goes, hereditary syphilis certainly does exert an unfavourable effect upon the physique of the children, quite apart from their having grave disease lesions. I mean their general physique.

11,261. You think it is a big factor in causing physical deterioration?—Yes, I do, because you can see it in the individual. It gradually saps the efficiency of the individual who suffers from the disease. To save your time, I group the next point, mental deficiency, with it. I am sorry that the Royal

Commission on the Feeble Minded unfortunately did not go into this subject of feeble-mindedness from the pathological standpoint. They only investigated it medically from the clinical standpoint, and therefore we have no anatomical facts. I am quite sure if that Commission had spent money on pathological examinations we should have had very valuable direct facts on that point bearing out the same view.

11,262. It is your opinion that a great deal of mental deficiency is due to venereal disease?—Yes.

11,263. That is your experience?—Yes.

11,264. Mental deficiency of all kinds?—Yes. You mean imbecility, idiocy, and so on?

11,265. Yes?—Of course I mean all kinds.

11,266. Then do you regard gonorrhœa as a very serious and very prevalent disease?—Very.

11,267. More prevalent than syphilis?—Yes.

11,268. A great deal more?—Yes. Of course, the general opinion is about equal. Statistics as far as they go are about equal; but I should have said that gonorrhœa was more like 60 per cent. of the total number of cases and syphilis the remaining 40. I think it is extremely prevalent.

11,269. One of the most serious results is blindness?—Yes. I mention this because I wanted to draw the attention of the Commission to the fact that the British Medical Association brought this matter forward first in 1909. As regards the question of the prevention of blindness, undoubtedly the existence of gonorrhœa must be put in the first place of importance. I need not worry the Commission with details; they are all contained in the Report published by the British Medical Association, in the minutes of the representative meeting for 1909, a very valuable report written by Mr. Sydney Stevenson. The British Medical Association, when they published that report, asked for certain definite things to be done. The first thing they asked for was notification, that is with regard to ophthalmia neonatorum; it is now recognised to be gonorrhœal.

11,270. That is granted now, is it not?—Yes. On the 1st April we shall have it, so headway is being made there. May I suggest on this point that if the Commission accept the view that ophthalmia neonatorum is gonorrhœal, would they include in their report some reference to the further question of the necessity of the public health medical authorities being furnished with a proper staff for following up. Undoubtedly the great difficulty at the present time in the matter of ophthalmia neonatorum is the question of the local authority not furnishing the medical officer of health with a proper staff of health visitors. What we want is to bring about a complete organisation to carry out the terms of the Association's Report.

11,271. When notification has been made, you think there should be a sufficient staff of health officers to go and deal with the case and probe it to the end?—Yes, what is called, technically, following up.

11,272. I understand your views with regard to the notification of venereal disease generally. Are you in favour of making it incumbent on all doctors to notify the diseases whenever found?—Certainly.

11,273. In which form would you suggest they should notify them?—To the medical officer of health for the district, direct.

11,274. Confidentially?—Yes, of course.

11,275. The giving of the names, but keeping them confidential?—Yes, certainly.

11,276. You think that should be made incumbent upon all medical officers?—I do.

11,277. Do you think they would resent the duty?—Yes, certainly.

11,278. Do you think the public would demand it of them?—No. I think the public would resent it too, because the public are so completely ignorant of public health matters; they are not aware that you cannot deal with an infectious disease satisfactorily or completely until you have notification. They are also under the impression, and of course unfortunately some medical men are under the impression too, that notification means revelation. It does not at all. Of course if the Commission reported, as I hope it will, in favour of notification, all it has to do is to point to the history

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of this subject of notification. I can speak to that again, because notification as such, as a State measure, is entirely within my own experience, and more especially in connection with my work in the Medical Defence Union. Objections to notification have been very strongly brought forward for the simplest diseases. Take scarlet fever. That was violently resisted by the medical profession, because they thought that professional confidence would be impugned by notification. Now, of course, there is no difficulty in the medical profession regarding notification of scarlet fever. Every argument that I have heard used, and I have heard a great many, against the notification of venereal diseases I have also heard used against the notification of these other so-called simpler diseases.

11,279. You do not think there is any distinction to be drawn arising from the want of moral stigma in one case and the presence of it in another?—No; because I have no fear of the confidential character of the notification being invaded.

11,280. Taking tuberculosis, which is somewhat on the same plane, is the notification of tuberculosis universally carried out?—I believe it is now.

11,281. Is there any reluctance on the part of doctors to notify?—I am sure there is no reluctance on the part of the doctor. I was hesitating, because I am not sure whether some local authorities, as representing the public, have not objected. I do not know, but I am pretty sure there would be no objection on the part of the medical profession.

11,282. (*Dr. Newsholme.*) It might save time if I asked a question here. Do not you think that in a good class practice a large proportion of tuberculous cases are not notified?—I cannot tell you; I cannot answer the question.

11,283. I have reason to think that is so?—Really? It is very sad if it is so. I have never heard at a medical meeting medical men directly express themselves against notification, except upon this, to my mind rather extreme point of view, professional confidence. As regards any moral stigma, of course if there was any fear of the facts being made known by the public medical officer of health that would be fatal to notification, but I do not know of any justification for such fear.

11,284. (*Chairman.*) I gather you attach extreme value to secrecy?—Certainly.

11,285. Do you think the public would have confidence in the staff of the medical officer of health—several people?—Of course, the facts might go through more than one hand. The condition of things is different to the example I quoted just now of scarlet fever; but I think the public experience of notification of those infectious diseases is quite satisfactory. I think the public would have sufficient confidence. At the present moment if there is a case of scarlet fever next door to you in a city you do not know it; no one knows it. The only person who knows it is the medical officer of health. Even if the inspector of nuisances comes to do disinfection or anything of that sort people do not notice it. Personally, I sympathise with the fears of my friends who take such a very strong opposition to notification, but having seen all this opposition to notification gradually die down over these other infectious diseases, I believe it would just as soon die down with this. The reason there is so much contention on the subject now is simply because of the unfortunate hiding up of the whole subject by the public and by people who ought to have instructed the public before.

11,286. Notification to the medical officer of health would be of no value, would it, except for statistical purposes, unless further steps were taken by the medical officer of health?—Quite so. There are, of course, two reasons for notification, as I have just stated. The first is the statistical one. To my mind, from the statistical point of view alone we ought to have notification.

11,287. That is very important, I admit?—It is.

11,288. In fact, of very great importance?—For instance, with regard to this very important question

of distribution, we do not get much by asking the Registrar-General to tell us what the distribution of the disease is from deaths, because after all the vast majority of these people do not die; we want to know what is the distribution from living persons who are capable of communicating the disease to somebody else. Therefore, I think the statistical argument is quite enough; for my purpose it is quite enough; from the public health point of view it is quite enough. Then there is the further point of benefit to the person whose case is notified. I think the provisions for treatment really meet all his or her interests. As far as the medical officer of health goes, I think the only further point that would come to his cognisance would be the point I raised in my *précis* before, about housing and overcrowding. It would be very essential then for him to make direct enquiries.

11,289. You think that notification should be accompanied by some statement of the surroundings?—What I meant was this. Those people who object to notification have brought forward this reason. They have said: Oh, if you have notification, the moment the medical officer receives the notification he will send someone in uniform, who will knock at the front door and want to come in, and so on, and all the neighbours will have their heads out of the window. I do not think so at all. If notification came from a street, the character of which which was well known to the medical officer of health to be extremely bad from a sanitary point of view, yes; then he might send somebody, but those sort of people are quite accustomed to sanitary officials coming in and asking them all sorts of questions.

11,290. Do you think it would be desirable that directly notification had been made some further action should be taken of either compelling or worrying the infected person into going and getting best treatment?—Yes, I think a great deal of the work of the medical officer of health could be saved if the notification, when made by a medical man, contained the further statement, "Patient under treatment." Then all the responsibility practically would be taken from the medical officer of health and put upon the practitioner who had charge of the case.

11,291. The notification might be completely anonymous, might it not, if it was only required for statistical purposes?—Yes.

11,292. That would be the line of least resistance?—For statistical purposes names are of no consequence whatever.

11,293. Would you regard gonorrhœa as a fertile cause of disease among women?—It is the prime cause of inflammatory disease in women, but the public do not know that; they are gradually learning the truth, however.

11,294. Does it cause physical deterioration?—Yes. I put that in because it is in the first place the great cause of sterility, and not only sterility in women, because a woman very often has the stigma put upon her of being sterile when it is her husband who is sterile from gonorrhœa, for the gonococcus materially affects the testicle. In the second place Martin, the German gynaecologist, has shown women who have gonorrhœa may become pregnant. It is, therefore, not an absolute preventive of fertility in women; it is an obvious condition that can coincide with pregnancy. If pregnancy has occurred between parents with damaged tissues, then it must have an effect upon the offspring, and racial deterioration be the result.

11,295. To go back to the question of notification for a moment, do you or do you not think it will have the effect of providing a richer harvest than ever for the quack?—No, I do not think it will make any difference at all to the quack.

11,296. None whatever?—I do not see how it can.

11,297. The idea being that the quack would not notify whereas the trained doctor would?—I beg your pardon, I was looking at it in an entirely different way. You mean to say it would cause people to go to a quack in preference to a doctor?

11,298. Yes?—I am quite aware that for a time there might be that sort of thing going on; but as far

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as I have seen in practice quackery in venereal disease is nothing nowadays to what it was 30 years ago.

11,299. Can you give us any figures in proof of that?—No, it is only my impression.

11,300. We have had the contrary view expressed to us. We know that advertising is very rife and where advertising exists the greater the quackery?—I think the old advertisements have been put a stop to by the Indecent Advertisements Act. Those advertisements led to an enormous amount of quackery, but that is being practically got rid of by that Act. But most of the quackery in the treatment of venereal disease was not done by people who advertised. Most of the quackery in the treatment of venereal disease was done by the chemist and on a large scale. My experience, rather, is that now there is less done by the chemist.

11,301. Do you think any special steps are required to check quackery at the present time?—Certainly, I do. I think all quackery ought to be dealt with by the State more actively than it is.

11,302. (*Sir Kenelm Digby.*) With regard to the question of privilege, I do not want to put a legal question to you, but I dare say you know it is a matter about which very different opinions have been held and are held at the present time?—Yes, of course.

11,303. I suppose you would say that as applied to the medical man there is a specially strong case for a better definition of the law?—Yes, certainly.

11,304. I do not know whether you happen to have looked at the article "Medicine" in the new edition of the Laws of England, in Lord Halsbury's name?—No, I have not.

11,305. You will find there an article on this very subject, and you will find different principles laid down by different judges. There is one very well-known judgment, I think, of Mr. Justice Erle and Chief Justice Tindal. The legal rule is laid down there in a very broad way, in such a way that it might very well cover the case you put of giving information to a friend without there being any legal duty or anything of that sort to do so. Do not you think we might, without any very great difficulty, frame a clause which would cover this particular case and extend the privilege to really bona fide communications made in what you might call a public object, at all events with the object of considering the effect on posterity? Do not you think that such a declaration of the law would meet with general approval?—I think it would meet with general approval, certainly.

11,306. It does not strike me that there would be any great difficulty with those principles before us of so framing a clause. The law is at present in a most uncertain state, and it occurred to me that that important amendment of the law might be considered by this Commission?—Yes, certainly. I brought the point forward in the hope that the Commission would report upon it.

11,307. On the question of legislation with regard to marriage, do you think if the sort of organisation you have sketched was carried out, so that people in all ranks of society might know where to go in order to get proper treatment and proper information as to their state, it would be impossible to have some legislation providing that people should not marry while they were in that state of danger? It is a difficult question to answer in the abstract, no doubt. Supposing there were some such scheme as this—I am putting it forward only as a supposition, not as an expression of opinion at all—but supposing you required before either the publication of banns or before obtaining a licence or certificate, a statutory declaration that the person had not suffered from any disease of that kind and supposing in the event of his not being able to make such a declaration as that you then required something in the nature of a certificate of reasonable safety before he was allowed to marry?—The American States are bringing forward and are proposing legislation of that sort. As you have stated the proposition there are two points: first, the declaration, and second, the certificate. It seems to me personally you never get rid of the revelation of

the fact to the other person who is to be a party to the marriage.

11,308. Those two points are not quite connected. I am now on the question of whether or not you might take some legal security against the marriage of persons while they were in an unfit state?—I do not see any objection to a declaration, but of course the declaration would have to stand for what it was worth.

11,309. There would be a penalty for a false declaration?—Exactly.

11,310. You will not go further than to say it is worth consideration?—I quite think it is worth consideration.

11,311. With regard to notification, a strong objection has been pressed upon us that notification would, as has been alluded to by the Chairman, tend to drive people still more into the hands of quacks?—Yes.

11,312. Rather than go the family doctor or to any doctor they would go to the quack who did not notify. One cannot help feeling that there is some force in that; but to combat that you would have some system of notification which would reveal as little as possible and prevent identification as much as possible?—Yes.

11,313. Have you ever thought that the finger-print system might be introduced for that purpose?—No, I have not.

11,314. If you could get over the prejudice against it it would fulfil all requirements, would it not?—Yes, but I am afraid people would think there was something of a criminal character about it.

11,315. It is absolutely infallible and ensures perfect certainty, and with a proper registry office you could find out exactly whether you had a record of the case or not?—No doubt it would be admirable if it could be introduced.

11,316. It has been introduced a good deal in India for civil purposes, not merely for criminal purposes, and might not there be combined with it a sort of record of the case, which could be kept? Questions have been asked about keeping a card recording the progress of the case. Supposing the first doctor put down the medical history of the case, and also the second doctor, if consulted, and so on, you would have a complete history of the case?—Yes, it would be useful.

11,317. Would it not be an advantage?—A great advantage. You would have to pay the medical man a fee for each report.

11,318. Still, if you got that, would not it be worth paying for?—I think it would be worth paying for from the point of view of the community. It is worth paying for as far as the individual is concerned, and it would ensure that the individual was being treated. As regards the medical facts that the community would gain from it, I do not think it is worth much.

11,319. It may be important evidence in the case of a false declaration?—Certainly.

11,320. Will you go so far as to say that is worth thinking of?—It is certainly worth thinking of.

11,321. (*Sir Almeric FitzRoy.*) You referred to the Departmental Committee on Physical Deterioration of 1903 and 1904, and you described it as being appointed by the House of Commons?—I thought it was.

11,322. The House of Commons has gone a good way towards absorbing the powers of the State, but has not yet effaced the executive. It was appointed by the Lord President, was it not?—Was it not appointed by resolution of the House of Commons?

11,323. No, after a discussion in the House of Lords, raised by the Bishop of Ripon, in fact?—Well, by resolution of one or other of the Houses. I am glad to receive that correction.

11,324. You spoke just now about alcohol as an important factor. You did not wish us to understand, I take it, that a total abstainer was immune from infection?—Oh, no.

11,325. He is as liable to infection as anyone?—No, not at all.

11,326. Do you say if he is actually exposed to infection he may not contract the malady?—The total abstainer's general resistance to disease is, of course, higher than that of a person who takes alcohol.

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11,327. I can quite understand the argument that he might have the disease with less virulence, but I do not understand you to say that he could expose himself to infection and not acquire the malady at all?—No, I did not say that.

11,328. That is my point?—You have mixed up two separate questions, if you will forgive me saying so, from a scientific point of view.

11,329. On the contrary, I want to keep the two questions divided?—I will separate the questions in this way. If the microbe comes into contact with the mucous membrane or the blood of a person who is a total abstainer, it has greater difficulty in invading the system than in the case of a person who takes alcohol.

11,330. That is my point. Is it possible for a total abstainer to expose himself to infection and yet not contract the malady?—Yes. Lots of people are exposed to infection, both teetotalers and moderate drinkers, and they do not contract the malady. If, for instance, there is absence of abrasion there is no direct entrance for the organism.

11,331. (*Dr. Newsholme.*) That is to say, if 100 people were exposed to a given infection and 20 non-teetotalers acquired it, less than 20 would acquire it if they were teetotalers?—Yes.

11,332. (*Sir Almeric FitzRoy.*) In connection with these particular maladies?—Yes. It is true of all infectious diseases, and it is curiously true of cancer, although we do not know whether or not cancer is an infectious disease. The existence of cancer among teetotalers is about half that among moderate drinkers.

11,333. Is that so?—Yes, and the greater resistance of teetotalers to typhoid is also true.

11,334. Is not cancer more prevalent with women than men, although women are, *ex hypothesi*, less strong drinkers than men?—Cancer of certain organs is more common in women.

11,335. As regards notification, what would you say to its establishment in connection with a system of register of disease universally adopted like the registers of death?—Do you mean that we should register every disease?

11,336. That there should be a register of disease kept in every locality?—I think it would be of immense value from a public health point of view, but unfortunately you will never get the community to pay for it; not yet.

11,337. (*Sir Malcolm Morris.*) You have given the greatest possible consideration to the question of the education of the public in these matters?—Yes.

11,338. Have you paid any attention at all to the way they are carrying out publicity in Germany and the United States at the present time?—The United States I know of. I do not know of any work in Germany.

11,339. They have a voluntary society. Have you seen their pamphlets?—I have seen the American pamphlets and their posters.

11,340. Do you think that system should be adopted in this country?—Yes, personally I do.

11,341. Do you think it is better that it should be left to be done by a voluntary society or do you think it ought to be done by the State?—What I have already said about school teachers has reference to the State, and, like all education, this subject can only be gradually introduced to a person's knowledge, which means that you must begin with the children. As regards adults I have already referred to them.

11,342. You would propose to teach the parents and the teachers?—That is my point, that for this generation we can only hope to teach the parents by literature.

11,343. You think there ought to be some public literature. Ought it to be done by a voluntary society as in the United States and Germany, or how do you advocate letting the public know?—My experience is that all these movements are first of all made by private societies and private individuals, and then the State gradually takes it up and does it definitely.

11,344. You think ultimately the State should do it?—Yes, ultimately.

11,345. Even though started by a voluntary society?—Ultimately it will not be necessary to teach the

adult because the children would have learnt it in the school. You have only to provide for one generation.

11,346. There is a good deal to do in one generation?—There is.

11,347. How is it to be done?—You mean, do I think the State ought to publish posters as it has done with regard to alcohol?

11,348. I will not say posters, but some form of information?—Yes, I should be quite willing to accede to that, certainly.

11,349. Do you think it would be feasible to inflict a penalty on anybody transmitting these diseases when they know they are infected?—No, I have had that put to me before. I have never been able to see how the court could possibly fix the responsibility.

11,350. On the question of compulsory notification, when the medical officer of health is informed of the fact that there is in a particular district a series of cases, have you any scheme to suggest as to the way he should act?—Yes, I have thought of that in connection with this very natural objection to notification, and I think that any enquiry on his part should be made either by himself personally or by his assistant medical officer.

11,351. What sort of measures do you think he should take if he found that in a particular district one or other of these diseases was very rife?—By means of notification he would get it down to the particular house, and when you come to the house you then come to the tenements, and when you come to the tenements you then come to the tenants of the tenements, and it would undoubtedly be his duty to see that the other inhabitants of the tenement were guarded against infection. That would mean telling them of the risks they were running. That brings us back to the question of privilege.

11,352. (*Dr. Newsholme.*) Do you mean he should tell them about using separate w.c.s, and so on?—Yes. He should tell them the relative risk they run and what precautions they should take in order to avoid the risk.

11,353. (*Sir Malcolm Morris.*) Should he be provided with pamphlets pointing out all the different ramifications of this disease so that they might be informed?—He would know what it was, whether it was syphilis or gonorrhœa, and he would give them the corresponding leaflet.

11,354. For instance, supposing there was a person in a tenement suffering from secondary syphilis of the mouth, the possibility of infecting drinking vessels, and so on?—Quite so.

11,355. He should make it his duty to let the person understand that he is in an infected state and ought not to transmit the disease in that way?—He should first of all tell the infected person, and if there were others inhabiting a one-room tenement I think he ought to tell the other inhabitants of that room that they must not use the same things to wash in, and so forth.

11,356. You referred just now to the inadequate treatment by means of mercury 30 to 35 years ago, that a very large number of people were treated with very small doses of mercury and were told after two years, or perhaps three, that they were perfectly free from disease and that they might marry. Have you personally seen many cases of syphilis in people that have been treated in that particular way?—Yes, a great many.

11,357. Diseases of the nervous system more especially?—Yes, chiefly.

11,358. Although they had had what was considered effective treatment at that time?—Yes, quite.

11,359. And were allowed to marry?—Yes, certainly.

11,360. (*Mr. Lane.*) At the beginning of your evidence you gave the Commission the impression that syphilis could only be transmitted from one human being to another?—Yes, I think so. I do not mean to say it is not inoculable into an animal, of course it is.

11,361. You say the probable increase of the disease after war is due to filth. May it not be due to another cause, that the men come back from a life of

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compelled continence and naturally seek a certain amount of indulgence?—Yes, what is called “indulgence.” As regards the increase of disease, I had in my mind privation as much as filth, that is to say the resistance of the individual was broken down, and therefore the amount of syphilis you get after a war is worse; its virulence is increased because you have the organism growing in people whose resistance is broken down by the hardships of war.

11,362. With regard to alcohol lowering the powers of resistance, is there any other way in which it may render disease worse, for instance there is the theory that it is antagonistic of mercury, that alcohol counteracts mercury?—I do not know what that rests on scientifically, but I quite agree that when one says that alcohol aggravates disease by lowering the power of resistance one means an immense amount. Alcohol of itself has a specially injurious effect upon the nervous system, and it has a degenerating effect on all the tissues of the body.

11,363. And helps to lower the power of resistance in that way?—Yes, it causes widespread degeneration of the body. General paralysis of the insane used to be said to be due to alcohol and syphilis, but alcohol is not a necessary factor although an extremely common factor in general paralysis.

11,364. As regards contagion, if the two classes are exposed to contagion, those under the influence of alcohol and those who abstain, and an abrasion is present, both are equally certain to get the disease?—I doubt it. That was the point put to me before. I think the chances are that the teetotaler will resist better. There can be no doubt that a great many people are constantly exposed to infectious diseases, tuberculosis and all the rest, and while fortunately they do not get infected, those who take alcohol suffer more than total abstainers.

11,365. Do you think if the spirochæte was inoculated into an abraded surface of an abstainer and of one who was the reverse, the abstainer might escape and the other certainly would not?—I do not say the other one would certainly get it. All I was saying was that people of both classes are constantly exposed to the disease, and some of them accidentally escape, because it takes an appreciable time, half an hour for instance, for the organism to work its way into the blood channels, and there is, of course, the chance of the person washing himself and so getting rid of it. You have always to consider that chance in practical life; but when you come to resistance of the body, the difference is quite clear.

11,366. The alcoholics must wash themselves just as much as the abstainers?—Certainly, that is why the alcoholic may escape. When an alcoholic escapes I should consider that was probably the reason.

11,367. With regard to treatment under the National Insurance Act, you say you think the panel doctor is quite capable of treating cases of venereal disease?—Yes, I do.

11,368. Would you trust him to administer salvarsan?—I was answering with regard to his capability of giving an intra-muscular injection.

11,369. Have you had much experience of the giving of intra-muscular injections?—Yes.

11,370. Have you seen any disasters following?—I have not seen a single disaster, I have seen some pain.

11,371. My experience is quite the reverse. I have seen enormous abscesses and incapacity for work for months, and one man for a year?—That is not at all my experience and it is not the experience of the general practitioners whom I have advised to carry it out. As regards abscesses, that is undoubtedly a fault in technique.

11,372. There are some cases in which abscesses occur quite irrespective of technique I think?—I know this is stated.

11,373. I am not referring to Ehrlich. I am asking you for your own experience?—I have not seen abscess infection myself; one hears of it.

11,374. Have you had much experience of the intra-venous method?—Not in my own practice. I have seen a great deal practised by others.

11,375. Have you seen any disasters following that?—Personally I have not. I am aware of deaths having occurred. If the Commission is reporting on that point, my experience is that the disaster in question was undoubtedly due to arsenic poisoning. I do not agree with Ehrlich that those cases are another form of toxæmia.

11,376. Coming to the period necessary for treatment you are antagonistic to the old period of two years?—Yes.

11,377. In fact you are pretty strongly against it?—Yes.

11,378. You advocate treatment for five years. Do you think that is necessary now?—That I cannot answer obviously. As regards salvarsan, I think salvarsan alone is not enough; most of us now employ salvarsan and mercury together, but we have not yet got the facts to enable us to say what duration that is going to have.

11,379. What do you consider the best test period? I suggested five years just now because I know that many people cannot think about a subject unless they have some definite figure before them.

11,380. As a test of cure you would consider five years sufficient?—No, I did not say that. What I said, if I recollect rightly, was that the community should take a five years' period for self protection.

11,381. Obviously that would mean that in many cases they would be taking treatment for two or three, possibly more, years than necessary?—Possibly; your question is another way of asking me whether it is necessary to treat for five years with modern treatment by salvarsan and mercury. I have already said we have no facts yet to determine that point.

11,382. The best evidence of cure is reinfection?—You cannot carry that out as a means of test.

11,383. We have evidence that men have been treated at Rochester Row and have been reinfected within a year, therefore they must have been cured within a year. That is sufficient evidence, I take it—reinfection reported by men who are quite competent to talk on the subject?—Well, I should prefer to wait till we get a few more facts before I made up my mind on the point.

11,384. You would not accept the Wassermann test?—No, not if it is negative.

11,385. If it is positive you would tell the patient to go on with the treatment?—Yes.

11,386. If it is negative?—I should simply advise him empirically.

11,387. So that if you had a patient whom you had treated for three years and he came to you with a negative Wassermann you would not say that he was justified in getting married?—No.

11,388. I am afraid I told someone so this morning?—I think it is quite likely. That has nothing to do with the question scientifically.

11,389. The value of notification, I think you said, was only for statistics?—No, I did not say that.

11,390. That it had no value for treatment?—I said it was for the protection of the community. The absence of name only is of value for statistics.

11,391. With regard to these cards that have been mentioned, do you think cards with a history of the case would be of any great value?—As regards continuity of treatment the card would be of value to the community.

11,392. Do you think the working man would carry this card with him?—No. I did not understand that he was to keep the card.

11,393. Who is going to keep it?—This last matter is no point of mine. I was asked whether a card would be of use if one was kept of the progress of the case, and I answered “Yes,” because I think it is of use to the individual that the notes of his case should be kept; and from the question put to me I understood that the medical officer of health would keep the card.

11,394. But the man moves about from one district to another?—I understood the question asked me was whether if the subsequent medical practitioner who saw the case sent in a report to the medical officer of

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health, the medical officer of health would enter it on the card.

11,395. You stated that in your opinion tuberculosis was universally notified?—I did not say in my opinion; I said I did not know; I thought it was in the majority of cases.

11,396. That applies principally to tuberculosis of the lung, does it not? Do you think that surgical tuberculosis is frequently notified?—I do not know what medical practitioners do in that matter at all. I have never heard any report from a medical officer of health on that point.

11,397. Cases going to hospital for instance, tubercular disease of the hip joint. Do you think they ought to be notified?—They ought to be.

(*Dr. Newsholme.*) They are usually in hospitals.

(*Mr. Lane.*) May I ask, Dr. Newsholme, who does the notification.

(*Dr. Newsholme.*) Usually the house physician or the house surgeon.

11,398. (*Mrs. Creighton.*) You have referred to the system of certification of death in Switzerland. Have you any experience which would show how far those Swiss papers were filled up by the doctors carefully?—No, I have none. The Swiss system was commenced on the 1st January 1891, that is to say, it has been going on for 23 years in the large towns with more than 10,000 inhabitants; it was commenced on the 1st January 1893 in urban districts and in rural districts too with more than 5,000 inhabitants; and on the 1st January 1901, 13 years ago, it was made universal over the whole of Switzerland.

11,399. You do not know how far those papers were filled up fully and accurately?—No.

11,400. It seems to be a great business to fill up one of those; it requires a great deal of information?—I think a medical practitioner could easily do it.

11,401. I think I am right in assuming that one of the great causes of the prevalence of those diseases is the existence of prostitution?—Certainly.

11,402. Therefore any attempt to try and wipe out venereal diseases without also trying to get rid of prostitution is a failure and must be a failure?—Yes, very largely.

11,403. In combating prostitution, I gather you feel it would not only be necessary to try and get rid of the prostitute herself but to teach men not to resort to prostitutes?—Yes, of course.

11,404. Therefore the teaching of chastity must be one of the primary means of getting rid of venereal diseases?—Yes, which, I take it, would come in in school life; and that is the reason why I think the teacher must take this whole subject in hand in addition to the action of the parent and the moral education in the home.

11,405. With regard to the books such as Miss Pankhurst's, which, I gather, you spoke of with commendation, as a way of enlightening the public, have you at all considered the effect upon a young girl's mind of reading such a book?—I have heard this question argued, and I daresay there are some people to whom it might cause so much pain as to also cause revulsion, but I am perfectly certain that that feeling would not last.

11,406. Do not you think it is of the greatest importance, even if young people are to know about these things, that they should be taught about them in the right way?—Yes, I have already said so, and that is the reason why I think the education ought to proceed in the school by gradual steps. I referred to this literature (Miss Pankhurst's book) as of value to adults.

11,407. Yes, but at the present moment Miss Pankhurst's book is being distributed broadcast among young people?—Yes, anybody who buys it.

11,408. People are being encouraged to buy it. I am asking you these questions because you spoke in praise of it as a means of enlightening the public?—Excuse me, I spoke in praise of it because if I had sat down myself to write a book like this I do not think I could have done it without vulgarising it. So far as a medical man is concerned, it is difficult for him to write about medical matters in the lay press.

This book is written by a non-medical person and I think, succeeds in putting the facts without vulgarising them. That is why I commended it.

11,409. That must be a matter of opinion. I am thinking of the effect of revelations on such a wholesale scale being made on the minds of young people. That they should know something is one thing, but you would not wish them to know everything, would you?—My personal experience of children is that they know a great deal more than we think they know to begin with. What you consider to be a revelation is often no revelation at all. That means we have not begun their education, especially their sex education, early enough.

11,410. I am not speaking of sex education now, but simply of information as regards venereal diseases. Do you wish girls wholesale to be frightened off the very thought of marriage by statements on this subject?—I do not think they would be frightened off. I think what will happen would be simply this, that before they married they would make enquiry, and I think it would be an excellent thing for the nation. I think the deplorable thing is that so many girls get married without making any enquiry at all and their life is made miserable ever after.

11,411. You are not afraid of revulsion against the male sex generally being produced by literature of that sort?—No, I have no fear at all.

11,412. You have not come across that revulsion?—I do not say I have not come across people who have a kind of revulsion against the male sex: I have met such people; but I have not met many yet; there may be some, but I do not happen to have met them. I agree with you it may cause that feeling in some people's minds, but I think that would only last for a year or two. The fact is this subject has been so concealed from the public that it comes to people as a mental horror. That happens with all questions with which people are not familiar till they get accustomed to it. I think the public will get accustomed to it, and I think the quicker they do the better.

11,413. Are you not afraid that if revelations are made in a way which shocks the public mind it may produce a reaction again in favour of secrecy?—Oh, no. My opinion is that these things cannot be any longer hid. As regards the suddenness with which the revelation is made, well, it cannot be helped.

11,414. Your view is knowledge at any price?—Yes, I quite agree.

11,415. (*Mrs. Burgwin.*) Would you go so far as to back your opinion and advise that that book of Miss Pankhurst's should be used as a text-book in schools?—No, of course not. But that is not backing my opinion, that is rather putting my opinion on a false platform altogether. I thought I had made it perfectly clear to the Commission, and I put it in my précis, the difference between instruction to children and instruction to adults. This book I referred to only under the heading of adults. I would not put the book into the hands of young children.

11,416. (*Mrs. Creighton.*) The book is being used to enlighten young girls?—I think they are adults.

11,417. Girls from the age of 17 or 18?—Yes, certainly. Girls of 17 or 18 know a great deal about these questions, a great deal more than people think, and ought to in view of the fact that not a few marry at 18.

11,418. (*Mrs. Scharlieb.*) Is it not a fact that children in elementary schools, amongst others, who have to live in tenement houses, in one or two rooms, father, mother, grown-up children, and small children all together, with all the mysteries of birth and death and everything else constantly before their eyes, know in a most undesirable way what we should like to impart to them in a decent way?—That is so. Immorality among little children is well known in the medical profession; and what we want to do is to bring about their instruction in a proper manner. The only great difficulty is what I referred to before, that the school teachers themselves, already exhausted by overwork, feel that this is not for them, but is really for the parents.

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11,419. Do not you think it possible that one or two lectures each term might be given by medical men and medical women, medical men to boys and medical women to little girls, that is to say, children under 14, so that we might give them decent instruction, at any rate, in physiology and the reproductive portion of life?—I think there are very few people who could give those lectures. That is what I meant just now by vulgarising the subject.

11,420. But would not they be more likely to do it better than the uninstructed teacher? I do not mean that every doctor should do it; I do not say that at all?—I have always thought the teacher could do it better than we could, but I am open to correction.

11,421. Then you would teach the teacher first?—Yes, the training colleges need a great many reforms, and that is one of them.

11,422. Again, is it your opinion that we should endeavour to teach physiology and hygiene in the elementary schools, and that we should warn young men and women from the pathological side subsequently?—Undoubtedly.

11,423. That in the workshops, the universities and the colleges, whether for men or women, there should be definite instruction given of the dangers?—Yes. I was asked about universities by the chairman, and I replied that I thought by the time they got to the universities they would have been already instructed at their secondary schools, and the same should apply to workshops.

11,424. Your opinion is that physiology should be taught to little children and pathological warnings should be administered to students?—Quite.

11,425. Whether he be rich or poor, well educated or badly educated, we should all have the chance of warning?—Quite.

11,426. (*Mr. Philip Snowden.*) You have been in the chair a long time, and I will not trouble you at any great length. You divide venereal diseases into three classes: soft chancre, gonorrhœa, and syphilis?—Yes.

11,427. Are those quite separate and distinct in their character?—Yes, they are due to different organisms altogether, different microbes.

11,428. Am I, as a layman, to infer from the use of soft chancre that there is hard chancre?—Yes; hard chancre is the initial sore produced by the microbe of syphilis; soft chancre is a sort of ulcer totally different in character, and because it was very granular it was called soft chancre. We now know that soft chancre is due to a bacillus, which can be easily destroyed by proper disinfection; it is not a serious disease like syphilis at all; it is relatively of little importance.

11,429. It does not leave the after effects that result from gonorrhœa and syphilis?—No. The only thing about it is that it is very liable to be associated with other microbes which produce abscesses in the glands in the groin.

11,430. From the appearance of soft chancre is there any likelihood of mistaking it for syphilis?—No, but unfortunately it may coincide with syphilis, and for a long time there was great difficulty on this subject because cases occurred where apparently soft chancre was followed by syphilitic manifestations until it was found that the person had the two organisms, he had a double infection; he got the organism producing soft chancre and also the spirochæte which entered the blood and caused the general disease syphilis.

11,431. We have been told that syphilis was not known in Europe up to some 400 or 500 years ago?—Yes, that is commonly asserted.

11,432. From evidence we have had before this Commission, if syphilis be not the cause it is at any rate an aggravation of a great many other diseases?—Yes, certainly.

11,433. Is it not the fact that those diseases which are now attributed either wholly or to a large extent to syphilis were in existence before the introduction of syphilis into Europe?—Certainly.

11,434. Would it not naturally follow from that that there may be a disposition to exaggerate the influence that syphilis has either as a primary cause or a contri-

butory cause of other diseases?—No, I do not think so. I do not think in the present pathological diagnosis of cases there is any exaggeration of the part played by syphilis, and in the Middle Ages it was confused with other diseases, *e.g.*, leprosy.

11,435. For instance, you said that blindness was to a very large extent due to gonorrhœa?—Yes.

11,436. You referred to a special form which is about to be notified?—Yes, ophthalmia neonatorum.

11,437. You stated also that gonorrhœa is very widespread?—Yes.

11,438. If one of the common results or effects of gonorrhœa is to produce blindness, how do you account for the fact that we have in the country to-day in a population of about 46 millions only some 40,000 blind persons?—My explanation is this. Of course in cases of parturition attended by the medical profession care has been taken of the eyes of the children, and for a great many years, long before we knew that ophthalmia neonatorum was due to the gonococcus, it was treated by the medical profession. That would account for a great many cases getting well, and so people escaped blindness. But on the question of blindness, census returns are unfortunately, like all our national vital statistics, extremely faulty. That does not in any way represent the number of blind; as Bishop Harman has shown, they are enormously above 40,000. As regards syphilis there is a certain amount of blindness which comes on after puberty due largely to syphilis, but now probably the figure is very much smaller than it used to be because the treatment of syphilis being so much better we do not see the keratitis we used to.

11,439. In answer to a question put to you by the chairman you said very emphatically that if the diseases were left in the hope that they might wear themselves out it would be a monstrous conclusion?—Yes.

11,440. Later I understood you to say that there was a possibility (I suppose you meant in individual cases) of that disease wearing itself out and of the individual becoming, apparently at any rate, free from all traces of it by what one might call the recuperative powers of nature. Do you think that is possible?—I was only referring to syphilis. That is the same point really that Mr. Lane put to me just now when he said that people were completely cured in a year, that is to say, that at the end of a year the person was just as well as if he had never been infected. Of course, very many of us do not accept that, and up till quite recently the idea was that once a person got syphilis he could never really be regarded as being perfectly well, the reason being that a person infected with syphilis may be treated extremely well and may apparently get perfectly well and he may go on for 15 or 20 years perfectly well and then he may begin to develop syphilis of the nervous system. That has, of course, occurred again and again, and so it has given rise to the view once syphilitic always syphilitic. That is the way it is put in the text-books.

11,441. You think syphilis is different from other diseases. Of course, there are diseases that nature will cure?—Malaria, for instance. If people come back to England they gradually get rid of their malaria; you examine their blood and you cannot find the organism in the blood; they have apparently got perfectly well. I do not see why that should not also occur with syphilis. I think it probably does.

11,442. The reason I put the question to you is this. I had sent to me the other day (I am not quite sure where it came from) an article by an American doctor on this question; and the main point of the article was that the best method of treating syphilis was to adopt a perfectly healthy and natural course of life and then the disease would be eradicated from the system. You would not accept that?—No, not for a moment, because of the disastrous results of untreated syphilis of the old days, mercury being used probably since the seventeenth century; but the reaction against mercury at the beginning of last century was such that people were practically left to nature, and the results were so disastrous that the profession went back to mercury. You cannot deal with syphilis without a certain amount of disinfection of the system.

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I am not saying that the disease cannot be cured; personally I think it can be cured, but only in a certain small percentage of cases. The question the chairman put to me really was the direct one, whether the nation should be allowed to get rid of the disease by everybody becoming immune against it, in other words everybody being infected by it. That is in my opinion a horrible theory.

11,443. Now I want to ask you a question or two about the education of children. From what you have said I gather that it should be rather in the nature of education than a warning?—Yes, quite. You begin with nature study with infants.

11,444. (*Mrs. Burgwin.*) May I ask how old you are speaking of?—From the time they go to school.

11,445. Five years of age?—Yes, nature study. As far as that goes, children under five can be taught nature study in an elementary way, of course. Nature study leads up to physiology—physiology not taught academically as it is under the present code of the Board of Education, but taught as part of the rational training of the mind. Then when the children get to 12 or 14 you have the beginning of puberty, the time when, as Mrs. Scharlieb has reminded us, these children in overcrowded tenements tend to become immoral; in fact they are often immoral between 10 and 11. When the children get to 11 or 12 you teach them, as gradually as you can do it, nature study, botany, and so on, and then on the sex question—reproduction.

11,446. (*Mr. Philip Snowden.*) You are raising a far wider question than the question of these particular diseases?—Yes, I am, because that is only to come later. The general sex education must come first.

11,447. Do you think it would be sufficient if young people about that age were warned of the dangers of prostitution and the serious results that might follow the contracting of these diseases?—I would not speak about these diseases until they had arrived at the age of puberty.

11,448. Do you think it would be sufficient if they were warned of the dangers that would result from prostitution?—I think it would be a great help.

11,449. You would not go further than that?—I think you would have done all you could.

11,450. I am leaving out of account, of course, the immense moral influence of the home, the ordinary life and the line conversation takes in the home?—I think that is the real education of a child, the fundamental education at home.

11,451. That very much advertised book to which reference has been made this afternoon proposes a certain remedy for this evil?—What I understand the book to say is, that if certain specific conditions existed that would be the best way of combating this evil. That is what I gather from the book.

11,452. I gather the purpose of the book is to suggest that the reason for the existence of these evils is the denial of certain political rights to women and if those rights were conceded that would be one of the most effective ways of dealing with this evil?—Yes, I quite agree with that view, because if women were enfranchised the necessary legislation on this subject would be furthered enormously.

11,453. You do not think the effect upon a woman of reading that book would be to raise in her a sex bias—a sort of prejudice against man?—That was really Mrs. Creighton's point. I do not think so. I think in some minds it would for a time raise a certain amount of prejudice against man as a male, but as I said before I do not think that feeling would last. It is like a great many new facts when they occur to us, they come as a shock, but they gradually pass off and in a year or two we wonder that we felt any shock.

11,454. Now just a word or two on the question of notification. What would be the use of notifying a case of venereal disease except for the value that statistics might have unless it were followed up by some definite action by the local authority or some other body competent to deal with it?—It would be, that is my point.

11,455. How are you going to keep the notification secret if you are going to follow it up by some kind of

action by the public authority?—Of course there are the difficulties I referred to before—the objectionable visit of the inspector, and so on. I quite agree that there would have to be some regulations, for instance, if you like to lay down absolutely that only the medical officer of health, or his assistant, who is another medical man, should undertake that duty.

11,456. What would their duty be?—Their first duty would be to see that the patient was getting treatment. That is the first duty of the medical officer of health in relation to an infectious disease, to see that the individual is being treated. His second duty is to protect the community from risk of infection. As I said before, I think what he would do would be just to speak to the other inhabitants of the room that the patient was living in.

11,457. It might be possible for the public authority, the medical officer of health, to take the first step you mentioned without making known to those who were in any way associated with the individual what was the nature of the disease from which he was suffering, but would it not be impossible to take the second step without doing that?—You need not mention the nature of the disease; you need only say it is a catching disease. In hospital practice, in the out-patient department, one constantly tells people that such and such a disease is catching.

11,458. I must confess that your statement rather surprised me that you think the panel doctor is quite able to treat these diseases?—Indeed.

11,459. It conflicts very much with evidence we have had. We have had, I believe, more than one medical witness before the Commission who has stated very emphatically that the training the ordinary medical student gets in the treatment of these diseases is not at all adequate to enable him to deal with such cases in his private practice. You do not agree with that?—Has the Commission had any evidence laid before it that any medical practitioner said he was unable to treat the case of a paying patient? I am perfectly certain that no evidence of that kind has been laid before the Commission. What they probably said was that the sort of practitioner who was on the panel was not fit.

11,460. They were not referring to panel doctors at all; they were referring to the country practitioner or the ordinary town doctor in general practice?—Really! I am astonished.

11,461. Or, if you like, that the student who goes away from the medical school to begin practising on his own account is not equipped to deal with diseases of this character?—Really! I do not agree with it at all. I quite agree, taking London, for instance, that the number of patients who come to the out-patient department of a general hospital now with venereal disease is less than it was when I was a student, because the community has got to know of the accommodation at the Lock Hospital, and they can go there in the evening, and so on, and consequently they drift there rather than to the general hospital; but even now the student gets quite enough experience at the general hospital to train him for the treatment of these cases.

11,462. In your opinion then the ordinary practitioner, the panel doctor, is quite competent to properly diagnose a disease of this character?—I should have said so. I think what you were probably told was this—

11,463. I think I am quite clear as to what we were told?—I am putting myself in the position of a witness. I think a medical witness might have said that the panel doctor, or the majority of them, are not competent to carry out an intravenous injection of salvarsan, which is a dangerous thing. I admit that, but to say that the ordinary medical man cannot recognise venereal disease and cannot treat it I could not accept for a moment.

11,464. You think it is necessary for a patient to continue the treatment for four or five years at the very least?—Personally I do with present knowledge.

11,465. Do not you think that in itself is a great deterrent?—Of marriage—no.

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11,466. Not of marriage, but of an effective cure—the nuisance of continuing treatment for that length of time when the man feels in a good state of health?—That is so undoubtedly. Patients constantly drop their treatment, because it is such a nuisance. Our great difficulty is to persuade them to go on, but they drop it and in two or three years they turn up again with some syphilitic manifestation, and you say, “Why did you give it up?”—“Oh, I got tired of it.” That is a very great practical difficulty of treating the disease.

11,467. You say that you yourself have seen no disasters resulting from the use of salvarsan?—That is so.

11,468. Are you aware that that opinion is not universally held in the medical profession?—I did not say salvarsan did not kill people.

11,469. But you would not have said that you had seen no disastrous results if you had seen it kill somebody?—But I have not seen it myself. In the hospital to which I am attached a patient was killed by it. I know of it, but I did not see the patient myself. There are some 68 cases of direct death from intravenous injection, not due, in my opinion, to the actual injection of the fluid at the time, but simply to arsenic poisoning.

11,470. What length of time is covered by these 68 deaths to which you refer—since the beginning of your use of it?—Yes, I think so.

11,471. Over what area—this country?—No, Europe.

11,472. Are you aware that recently there has been a report published in Berlin, and that reference is there made to 300 deaths in Berlin alone by it?—I have not seen that.

(*Dr. Newsholme.*) It has been contradicted afterwards.

11,473. (*Mr. Philip Snowden.*) It is the official report?—It is not our experience in London. From what I have heard in conversation, and from what has been reported in the papers in London, I can only put together about seven or eight cases here. Undoubtedly intravenous injection could scarcely be done by the ordinary panel doctor without special instruction. When answering Mr. Lane I was referring to intra-muscular injection where you have to take a syringe and inject it into the muscle, and Mr. Lane asked me if I had not seen disasters resulting from that—abscesses; well, I have not.

11,474. We have had only a limited time of the use of salvarsan?—Exactly.

11,475. Do you think we have had sufficient experience to justify us in coming to the conclusion that it is effective in the treatment of this disease?—In curing, no.

11,476. If it is to take five years, we have not had five years' experience of it yet?—No, we have not. Personally, I do not consider it yet proved that salvarsan cures the disease, although it has an extraordinary curative effect on the initial symptoms; it will clear up the initial symptoms of syphilis very rapidly indeed; but, as I said before, everybody now agrees that to treat syphilis properly you must give mercury as well as salvarsan.

11,477. (*Dr. Newsholme.*) Do you confine that statement to the initial symptoms—clearing up the initial symptoms?—Yes, salvarsan is useless, or almost useless, for syphilis of the nervous system.

11,478. (*Mr. Philip Snowden.*) Take a rash, do you include that?—I meant to include that by “initial.”

11,479. Do you include secondary symptoms by initial?—Yes, because they occur within a few weeks. The old division of symptoms into primary, secondary and tertiary, although very unscientific, is convenient; the thing is really continuous. If you take the first two, primary and secondary, salvarsan does wonders in the way of clearing up the symptoms.

11,480. At what time does the secondary symptoms begin—three months after the primary?—It can be within much less than three months; it can be within six weeks. A rash will begin in six weeks.

11,481. Reference has been made to this before, in fact I put a question to one of the witnesses as to the manifestation of secondary symptoms, and that is what

I was told; but it does not convey very much information to me. What is the character of the rash?—It begins by being a papular rash, and you can have ultimately every form of rash up to the extreme tertiary form, *rupia*.

11,482. I do not understand these medical terms?—I will put it in this way: those symptoms of syphilis which arise within the first year or 18 months can be remarkably cured apparently by salvarsan; you inject salvarsan and those symptoms clear up in a wonderful way. But you cannot say at the end of that time that the person is cured; because you see the same thing sometimes with enormous doses of mercury. We quite recognise now that salvarsan is practically of no use for diseases of the nervous system which occur 15 or 20 years after the person had the infection.

11,483. Does that secondary symptom in the form of a rash invariably appear? I gather that it does?—Yes, if it is looked for. One has never failed to find a rash in a continuously observed case.

11,484. If it be a rash it need not be looked for?—It may be so slight that a patient will say he has had no rash.

11,485. It is not only a rash, but there is affection of the throat and mucus membrane and various other symptoms associated with it. Now, Dr. Mott wanted me to put one question to you with regard to your statement as to the fall of the virulence of the disease. He wanted me to ask you whether that applied to cases of general paralysis?—No.

11,486. His opinion appears to be that cases remain very much the same?—I think it is so. But that is a different question. General paralysis is a very late manifestation, and it rather follows that if you have an organism of rather weak virulence it will drag on in a patient, whereas if it is a very virulent thing it rushes ahead and is referred to as infection. General paralysis, of course, is very prevalent indeed.

11,487. Do you agree with the statement made to us that every case of general paralysis is syphilitic in character?—Yes, every case of general paralysis that I have seen in my opinion has evidenced other signs of syphilis. I have no shadow of doubt about it in my own mind.

11,488. (*Mrs. Creighton.*) Can general paralysis be congenital?—Yes.

11,489. A child might have it?—Yes. Dr. Mott has published cases of juvenile general paralysis.

11,490. Could a man of advanced life having general paralysis have acquired that from his father or would it have been his own fault?—That is a difficult question to answer. Theoretically it is quite possible; but a diagnosis of general paralysis ought not to be accepted from clinical manifestations alone; if there was any question of that sort it ought to be confirmed by autopsy.

11,491. (*Rev. J. Scott Lidgett.*) Do I understand you to attach the same high importance to the intravenous treatment conjoined with mercury that many witnesses have stated?—Yes.

11,492. I take it the technique is difficult to acquire?—Yes, intravenous.

11,493. Until there is complete mastery of the technique it must be carried out by specially selected medical officers?—Yes.

11,494. Would you put it that such fatalities as have occurred, few or many, have probably been due to imperfect technique?—No, I think the fatalities that have occurred have been due to overdoses, that is to say the individual has received more arsenic into his system than he has been able to tolerate.

11,495. I suppose there are differences in the amount that different patients can tolerate?—Very considerable differences. Those fatalities have occurred with doses of a gramme; I have never seen the slightest trouble from doses of half a gramme.

11,496. May I take it that in your opinion the salvarsan treatment has so far established its general efficacy that it ought to be strongly recommended by this Commission?—Yes, certainly.

11,497. Now a few questions about the educational question. I think I understood you to say that nature

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study should be explained in the school and every child taught the groundwork of hygiene?—The groundwork of physiology and therefore the groundwork of hygiene.

11,498. You are bearing in mind the fact that taking the country over a large proportion of children leave school before 13 and almost all have left by 14?—Yes.

11,499. How far would you in the case of children of such tender years develop nature study and hygiene to give express sex teaching as applied to human relations?—That is the condition of things at present. Personally I think the school age ought to be extended. I would teach the child if we are to do it empirically. I would teach every child at the age of 12 reproduction.

11,500. Reproduction in the lower animals or in man?—Up to man. It will have learnt reproduction from the animal point of view already through physiology and it will have got an idea of reproduction from botany which forms the main substance of nature study. Nature study is almost all botany nowadays.

11,501. Would you make that a subject of class teaching?—Sex education, applied to man, no. I should make that individual.

11,502. That is very important?—It is.

11,503. You recognise that there are great differences in the knowledge and temperaments of various children?—Of course.

11,504. You would choose your time and method of communicating it?—Yes, I would leave that to the teacher.

11,505. You would entrust it to very experienced teachers or to medical officers from time to time?—Yes.

11,506. Your instruction on that point would be to some extent directed by your knowledge of anything that was morbid either in the child's temperament or experience?—Yes.

11,507. So you would not have us treat it as an ordinary part of nature study given to all in a common way at one time by class teaching?—No, not the sex question when it applies to man. It is not necessary. It could all be done in five minutes.

11,508. You would realise, I suppose, that in some morbid cases, and they may be many, there is a danger of sex obsession?—Yes.

11,509. And that has to be carefully guarded against?—Yes. That is why I think the teaching must be individual.

11,510. I am greatly relieved to hear you say that if I may venture to say so. There is a great gap between the ages of 13 and 16, and I presume, after all, the great onset of danger does not arise till some years after this teaching would have been given under our present elementary school conditions?—It is very difficult to answer that. One unfortunately knows of cases that had begun extraordinarily early. Of course, generalising, I suppose you would have to take 15, the age of puberty, as the most critical period.

11,511. Do you think that theoretical instruction given at 13 or 14 will withstand the onset of passionate stimulations when it arises?—Yes, I think so. I think some knowledge is better than none; consequently I think a year or 15 months is something gained.

11,512. Would you lay stress in the preparation of children rather upon moral influence than mere scientific teaching?—Certainly. I said so. I said the influence of the home is the most important factor.

11,513. Are you aware that many of our most experienced teachers do give a good deal of this information individually?—Yes.

11,514. With regard to physiology as a class study you know, of course, that our curriculum is very crowded?—Yes; may I say that it is so, because the system of training the mind is not scientifically guided or directed by the Board of Education. You have science treated as an outside subject instead of it being part of the fundamental teaching of the child.

11,515. To come to the subject, we have to choose between many branches of science?—No, forgive me, that is not the scientific view of the situation; that is what is so despairing. Believe me, that is not the

way to speak of physical science in education. I cannot go into it now.

11,516. It is the current belief that mental discipline secured by precision, measurements and calculation in physics and chemistry is much superior to that which can be given through subjects like botany or physiology?—I wish it were current belief.

11,517. I believe it is the current belief of those who have to fix the curriculum, and they, therefore, select physics and chemistry because they lend themselves more to mathematical calculation and practical work?—Yes, but a study of the curriculum of the Board of Education shows that the thing is perfectly haphazard. Physics or chemistry is one branch of science and, therefore, has to be taught, but it has no relation to our meaning of the word science as a means of training the mind and of educating the child in the principles and facts of scientific knowledge.

11,518. (*Mrs. Burgwin.*) Do you think that knowledge would prevent immorality?—Yes, I do.

11,519. It must be in the minds of all of us that many men and women, notoriously brilliant nevertheless, do in fact suffer themselves?—When you come to the case of children, curiosity is unsatisfied knowledge, but curiosity is also an emblem of a mind in which there has been no foundation of knowledge. I think curiosity is the foundation of a great deal of immorality. It is from that point of view that I advocate this instruction.

11,520. You have told us that in the medical profession immorality amongst children is notorious?—Yes.

11,521. Amongst what class of children?—Chiefly the poorest, the overcrowded class.

11,522. Not amongst the richer classes?—Yes—a certain amount; it all depends. Amongst the richer classes immorality in children is very often started by servants; the richer classes are, of course, especially open to that. The children of the richer classes are very often neglected by their parents; they are left to servants and other people. The home life also among the richer classes is very defective and that again is a factor of immorality.

11,523. I think it is even common knowledge that immorality is as rife amongst very clean, well brought-up children as amongst the very poor in overcrowded houses?—I should have said it was rife, but not as rife.

11,524. I have had cases helped by you. With regard to mental deficiency, do you think that there is a good deal of syphilis accounting for mental deficiency in children?—Of course here I am not on safe ground because I have not actual figures; that is the worst of it; but my impression is that there is a good deal. Unfortunately, we have no statistics to go upon, but considering that you may have syphilis in the third generation, I think it probably is a very serious factor in the mental deficiency question. There are so many degrees of its effects.

11,525. There are many cases you are sure of and others that you are in great doubt about?—Yes.

11,526. I find that difficulty. May I put one of my own difficulties to you: a family of four. The first and second brilliant scholarship children, the third mentally deficient, and the fourth a normal child. That from a hereditary point of view causes me sometimes a great deal of difficulty in thinking out what I am going to do with that particular case?—Our difficulty there is because the children are born sequentially. The same thing occurs in a litter of animals, you get a throw-back in a litter of animals. I have often thought of that difficulty. I have often thought that a sequence of healthy children in front of a defective one still did not rule it out and I still think it does not rule it out as a possibility.

11,527. You grant it is a difficulty, especially to the lay mind?—It is a difficulty and I have always felt it, and I am always open to the discovery of factors of feeble-mindedness that we have not dreamt of.

11,528. (*Dr. Newsholme.*) Might it not be that that third child was feeble-minded as the result of the bad use of forceps at childbirth injuring the brain?—That question of injury I am getting more and more

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doubtful about. Forceps are applied usually in cases of delayed parturition.

11,529. It may be delayed parturition that necessitated the use of forceps, but may it not be the bad use of forceps that was the cause of that feeble-mindedness?—Undoubtedly, but delayed parturition is itself a more fertile source of brain injury.

11,530. (*Mrs. Burgwin.*) The cases I had in my mind were not cases where there was the least suspicion of injury at birth, but where I have had a suspicion that that third child is syphilitically mentally deficient, but the first, second, and fourth in the same family showed no signs?—I have seen the same families, of course, and as regards absence of difficulty at birth, it is very often the case that the child is distinctly small-headed and there is no physical difficulty at birth.

11,531. You think that more people suffering from venereal disease go to the Lock Hospital than formerly?—Certainly.

11,532. Our evidence is that fewer go than in former years?—More go to general hospitals?

11,533. I do not know where they go to, but certainly the number at the Lock Hospital has decreased?—Really! I am surprised to hear it.

(*Dr. Newsholme.*) That is the London Lock Hospital.

11,534. (*Mrs. Burgwin.*) You would agree with me in teaching children. I notice everyone speaks of the dangers of immorality, but surely you would also teach the sin of it?—Quite so, and the national side of it of course. In these sort of things, people constantly lay stress on the negative side and leave out the positive. It is a wrong method, I agree.

11,535. That is where I should join issue with you. That teaching you can always give to a young child in a good home and not make it a course of teaching at school?—Certainly you can. I said such teaching should be given both at home and at school.

11,536. I think that is the great protection for a child?—Yes, certainly.

11,537. (*Dr. Newsholme.*) I would like to get the general position quite clear. You are in favour of the treatment of venereal diseases at general hospitals and dispensaries?—Yes, in special wards.

11,538. You are in favour also of the institution of pathological laboratories for the diagnosis of these diseases?—I am in favour, of course, of every health authority having its own bacteriological laboratory for the diagnosis of disease.

11,539. So that your main sheet anchors in the prevention and treatment of venereal disease are the provision of adequate treatment and provision for adequate diagnosis?—Certainly.

11,540. In both those respects you would be in favour of treatment and diagnosis being subsidised?—Yes, it must be.

11,541. That has not been mentioned before, but it is important?—Yes, it is; it must be subsidised.

11,542. It is not likely that adequate facilities either for diagnosis or treatment will be provided unless adequate subsidies are forthcoming?—Certainly.

11,543. With regard to national statistics, you rather went for, if I may use the phrase, the short list?—Yes.

11,544. On that I do not want to go into detail, but in order that a disease may rightly appear on that short list should not it be a disease which causes more than units in deaths?—Yes. My point was that you have on the short list smallpox; that only causes units in deaths.

11,545. In some years it may, but in other years not; but if you take syphilis some of the units which are given in these very important new statistics only cover 20,000 population, and on the basis of average distribution of syphilis all over the country that means you may have one death one year and three the next year—you know how statistics wobble—you could not therefore deduce anything from statistics on such an extremely small scale, could you?—My criticism was directed to the short list from the point of view that that is going to govern our statistics in future. If the report of the Commission is favourable to my views about secret certification of death you will have thousands of deaths in a few years and then you will have to alter your short list.

11,546. In the event of such secret certification there is no doubt that syphilis will be added to the short list, but with our present system of certification you have to depend on wider deductions for bigger areas, and Dr. Stevenson has come before us and shown that syphilis is more prevalent in towns than country districts, and more prevalent in certain towns than others. You could not form any conclusion of that sort from small units?—I quite admit that, but it is said to be notorious in the profession that syphilis is more rife in seaports than in inland towns. That would be brought out.

11,547. That has been brought out before the Commission. With reference to notification would not you actually get indirectly nearly everything you wanted for notification purposes if free treatment was provided by public authorities and you necessarily had at the same time registration of the cases attending there?—Yes, but I am sorry to say that would not bring together the cases; I do not suppose you would get more than one-third of the total number.

11,548. Supposing you got one-third, and another third from Wassermann's and other reactions, you would then have a very considerable beginning towards the statistical element of notification?—Yes, it would be a great improvement, of course.

11,549. Might it not be well to try that for two or three years before attempting to enforce what would be very hateful at first, namely, compulsory notification of all cases?—Of course, all our public measures are always done in the same way, with a total disregard of scientific principle. It is nothing to me what half-way house is adopted.

The witness withdrew.

THIRTIETH DAY.

Monday, March 30th, 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman*).

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. FREDERICK WALKER MOTT, F.R.S., M.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mr. PHILIP SNOWDEN, M.P.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. FLORENCE WILLEY called and examined.

11,550. What post do you now hold?—Assistant physician for diseases of women at the Royal Free Hospital.

11,551. How long have you held that post?—Six years.

11,552. Will you tell us what facilities you have in that hospital for the treatment of these diseases?—We have no special facilities; I mean to say no facilities labelled as such; but in the department of diseases of women there necessarily are cases admitted which belong to this group, but there are no special beds set apart for the treatment of the disease, and there is no special out-patient department set apart for it. The patients come to the general department for the diseases of women.

11,553. And do they come to you with these diseases in a direct form or come with results and complications from these diseases?—They come because they are suffering from some symptom. They do not know themselves what is the matter.

11,554. Then is your accommodation anything like sufficient for the number of cases which might be treated if it were?—Our accommodation is not sufficient for the number of gynaecological patients—our in-patient accommodation.

11,555. I mean that?—No, it is not sufficient for the gynaecological cases that come to the hospital. We have always patients on a waiting list for coming in; but we have not a great number of venereal cases such as we should have if our out-patient hour were more suitable to these patients. The morning hours are very difficult for women to come, many working-class girls and young women who are infected cannot come at that hour, and probably would come if there were suitable clinics for them—evening clinics, or at any rate after 6 o'clock.

11,556. Do they come to you quite freely without any reluctance?—Quite.

11,557. And in the gynaecological department the doctors are all women, are not they?—Yes, they are.

11,558. Do you think that is an attraction in bringing women with these complaints to your hospital?—It is very difficult to say of the women with these complaints, because it is a comparatively small proportion. I think it is an attraction to women generally suffering from any kind of gynaecological ailments. In special diseases of women I think it is an attraction to them to be able to come where there are all women.

11,559. Are the attendances at your out-patients' department keeping up to their normal figure?—In the diseases of women department the figures are steadily rising; but I think in our hospital, as in most others, the general numbers of out-patients are tending, if anything, to decrease. I should not like to specify with any certainty, because I have no special statistics; but from what I have been told with regard to other hospitals, certain types of out-patients are tending to decrease, and in our own hospital it is so; generally

the out-patients are slightly decreasing, but not in the department of diseases of women.

11,560. Is that due to the operation of the Insurance Act?—It is too soon really to be sure, I think.

11,561. Now, coming to the figures you have kindly furnished for us, you say the examination was made by Dr. Helen Chambers of the notes of consecutive cases from the in and out-patient department over a period of 3 or 4 years. Out of that you get in-patients 321, of whom 22 were certainly gonorrhœa, and 35 diagnosed as such but without certain proof. When you say "without certain proof," were all modern tests that we know of now, and can apply, used in the case of those 35?—No, or if they were used they did not give positive results, I mean, for instance, in many of the cases of inflammation of the tubes and ovaries, they would be cases of long-standing infection, assuming they are gonorrhœa. The films and cultures may have been made, but they have failed to give any result; but that in itself does not necessarily say the case was not gonorrhœa, because in long-standing cases it is sometimes very difficult to grow the organism or even get it in films, unless the films are very specially taken from special parts. So that it either means there was no opportunity in certain cases of getting bacteriological tests applied, or if they were applied they were negative, the culture being sterile; that is why some of these cases were excluded. The diagnosis would be made in those cases by excluding any other possible cause of the condition or by a likely history, or by both together.

11,562. Then in those cases it is more clinical evidence than microscopic?—Yes, in the cases I have marked as doubtful, but taking the two sets of figures together, the whole percentage that it works out at is a lower percentage than that given by nearly all observers.

11,563. Then coming to the syphilis patients: still out of 321 cases you had 7 which were undoubtedly syphilitic and 9 other cases were probably so. Leaving out the 7 that were certain, was the Wassermann test applied in the 9 which were probably syphilitic?—No, probably not. I think those cases were probably cases some few years ago in which it was quite impossible for us to get a Wassermann applied to every case which was doubtful.

11,564. Are you equipped for carrying out the Wassermann test in your own hospital?—Yes.

11,565. Have you sufficient facilities for carrying out as many tests as ought to be made?—Yes. We shall have a new pathological department which will be open this year, and that will give ample facilities for doing all the Wassermanns we require.

11,566. When you have those facilities I suppose in any case of doubt whatever the test will be applied?—Yes.

11,567. Now, coming to the out-patients' department. Out of 2,902 gynaecological out-patients 99 were certainly gonorrhœal, and 63 were cases of syphilis, while 118 were probably gonorrhœal and 21 probably syphilitic. In those cases also, I suppose, those

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[Continued.]

doubtful cases were not tested to the extreme extent of our powers in these days?—No.

11,568. So it is a consideration whether all those doubtful cases were cases of syphilitic disease?—Yes, though I am sure it would be nearer the truth to include than to exclude them.

11,569. And besides these probable cases, I suppose it is quite possible among many other persons, both in and out, there was the taint of venereal disease?—I think there is not the slightest doubt; because in our gynaecological department with the pathological facilities that we had, it would have been quite impossible to have put the strain on the pathological department of having Wassermanns done in a large number of cases which have none of the ordinary recognised signs, but such cases, where research work has been done on the subject, have shown a large proportion to give the reaction.

11,570. Of course it would have been of extreme value if you had been able to make those tests in all these cases?—Extremely valuable.

11,571. Then we may take it that these percentages do not represent anything like the real percentage of venereal infection among all these in and out-patients?—I should say certainly they do not represent it; but one cannot specify with any certainty at all of figures other than those.

11,572. Coming to the figures as you give them. You give us 5·9 per cent. were certain cases of venereal disease; 3·7 per cent. gonorrhœa, and 2·2 per cent. syphilis; and then you add, if we may include the cases without bacteriological evidence, which I understand you to say you think we ought to include?—Yes, I certainly think so.

11,573. The percentage would then be 11·6 per cent. venereal disease, 8·5 per cent. being gonorrhœa and 3·1 per cent. syphilis; and those you work out in a much more detailed table. But you assure us probably that is a considerable under estimate?—Yes, I think so.

11,574. You have a separate maternity department, I understand?—Yes.

11,575. How many women do you have in there at a time?—We have no beds at the moment. We have only an external department. The lying-in ward of the hospital is only being finished now in the new building, and will be opened this year. There is only the external department where the women are attended in their homes.

11,576. Then it does not mean a hospital department?—It does not mean an in-patient department.

11,577. Then during a period of five years you say 1,832 children were delivered under the auspices of the department?—Yes.

11,578. And not in the hospital?—Not in the hospital.

11,579. Of those 77 were stillborn, 49 full-term and 28 premature. Of the 49 full-term children, 5 had malformations incompatible with life. Of the remaining 44, 20 were syphilitic, making 44·4 per cent. Of the 28 premature children, 4 were syphilitic, making 14·28 per cent. of the whole. Taking the two together, 32·8 per cent. of the total stillbirths were due to syphilis. In that case you say the diagnosis in the majority of these stillborn cases was clinical only?—That is so, because it is only quite recently we have begun having every stillborn child examined for spirochætes and Wassermann reactions done on the mothers.

11,580. So that though you get a fairly high percentage of stillbirths, 28·8 per cent. stillbirths, due to syphilis, probably the real percentage is much higher than that?—Yes, it is. I have taken the diagnosis that was made at the time; but I really think that those figures are fairly accurate probably. Probably a great many more of the premature births were due to syphilis and I think possibly a few of the full-time stillbirths may not have been due to syphilis. So often the resident medical officers class a macerated fœtus as inevitably syphilitic, which I think is a fallacy. All macerated fœtuses are not syphilitic, though the majority are. I think there may be some fallacy

there; but it is probably more than made up by too small a percentage among the premature births.

11,581. But the general probability is that the percentage of total stillbirths is really higher?—Yes, really higher. Of course if one investigates the obstetrical history of those women one comes across a great many other miscarriages; so that raises it still more.

11,582. You say the majority of all the gynaecological and pathological patients are married women. In cases where syphilis or gonorrhœa is diagnosed, or thought to exist, is an inquiry made into the family histories?—Yes, it is; you mean the history of the husband and the history of the previous births, and so on?

11,583. Yes?—Yes, inquiry is made.

11,584. Do you sometimes get evidence from the family history?—Yes, and sometimes quite definite evidence; sometimes the women proffer it themselves.

11,585. Then you say "With scarcely any exception all cases of gonorrhœa were sterile after infection." What does that mean?—In going through the notes of these cases it is very striking. Where the history is that of a woman who is pregnant for the first time, she has the one child; but if she is infected with gonorrhœa, then her future history shows no children; but on the other hand, of course sometimes there are cases where a woman has had two or three children and then develops the symptoms of gonorrhœa. Then of course she is not sterile absolutely. She is only relatively sterile after the infection. But all these cases show very definitely the tendency of sterility to follow infection. There are hardly any cases of childbirth after the one child involved at the time.

11,586. After the infection takes place, if several children have been born does sterility then operate?—It works out so in these cases that have been investigated, there are hardly any cases in which children are born afterwards.

11,587. Now I come to your proposals. You strongly urge effective treatment in both diseases: in gonorrhœa to prevent a superficial infection from becoming more internal and then leading to relative or absolute sterility, chronic invalidism, or loss of generative organs. That means the earliest possible detection of the disease in gonorrhœa?—Yes; nearly all our cases come some time after infection. Very few of them come within a week or two.

11,588. And that would be important?—Very important.

11,589. As far as the risk of ophthalmia in the child born after infection is concerned, that is a question for the midwife as well as the doctor, is it not?—Yes; but if the women came for treatment when first they had symptoms so that they were treated early in the pregnancy, there would be less risk even with the care of midwives and doctors after confinement.

11,590. Then ophthalmia can be avoided by suitable treatment of the child immediately after birth?—Yes, it can, it might also be avoided if the mother were treated earlier by the child not becoming infected.

11,591. You also say it is necessary to avoid the spread of infection through ignorance and lack of cleanliness. Do you come across many cases of gonorrhœal infection from those causes, not sexual causes?—Yes. I have come across a good many cases. I remember one when I was registrar at the hospital. I was gynaecological registrar in the surgical gynaecological, and, at the same time, I was also working in the ophthalmic wards and in the gonorrhœa department. I remember in one case I was struck by the recurrence of the same name, and I traced in the various departments of the hospital three or four children out of one family all with various forms of gonorrhœa who had become infected by carelessness from the mother who was attending the gynaecological department. I have come across other cases too where the children have been infected.

11,592. Largely speaking, the only thing to correct that is more knowledge, more widely diffused?—Certainly, I think the patients ought to be given quite

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definite instruction as to what the possibilities of infection are.

11,593. Then coming to syphilis, you say the main objects are to prevent miscarriages, stillbirths, and congenital syphilis in children; to avoid later manifestations, and to prevent the spread of infection. Then you come back to what we all feel very strongly; that is, that early and scientific diagnosis by general practitioners of all cases which are suspicious is very desirable. By that I suppose you mean the general practitioner, in all cases where there is any possibility of infection of these diseases, should know exactly where to go and be able to get the microscopical and Wassermann test made?—Yes; I think it is quite impossible for the general practitioner to work otherwise.

11,594. All he has to know is, it is his duty if there is any chance of these diseases being present to take the best steps to have these tests made?—Yes.

11,595. Then the provision of some means of efficient treatment of such a nature that infected persons will avail themselves of it. By that I suppose you mean hospital premises; and, as you say, if there are clinics at times which are best suited to the conditions of the working classes?—Yes.

11,596. As far as your hospital is concerned, I understand you can do all your own Wassermann tests and all your microscopical examinations?—Yes, we can.

11,597. You think that all hospitals should be similarly equipped?—I think so, certainly. I should think that most of the London hospitals are so equipped.

11,598. Then you wish "facilities to be provided for the post-mortem examination of stillborn children and miscarriages, the result being notified by the doctor of the case in order to enable him or her to secure efficient treatment for the mother." By that you mean, of course, the doctor should send the material for examination to some public institution for analysis?—Yes.

11,599. And then be informed so as to know how to act. You would make that an understood duty of the doctor?—I think it should be. I think a vast number of syphilitic stillbirths or miscarriages would be avoided if the first syphilitic miscarriage or child were sent for examination and the spirochaetes were detected. The mother might be treated at once, and it would be a very great saving of infant life.

11,600. Then you say "that individuals giving a positive reaction, the mothers of syphilitic infants or miscarriages, and patients suffering from gonorrhœa, be advised to attend at such clinics as shall be provided for the purpose, when not being treated by a private doctor." I do not see how you would get these people in the first instance. They would not know, unless something unpleasant to themselves occurred, that they were absolutely infected. These people would come to your hospital because they have some disease inconvenient to them, and therefore they come; but suppose they have not, and they go on producing syphilitic infants, how are you to get at it?—Those cases would be got at in the way I suggest, if it were the rule that all miscarriages and stillbirths were examined. Their doctor then, or the midwife, would be notified that that woman was syphilitic, and then it would be the duty of her own doctor to either treat her himself or to tell her that she needs treatment, and explain to her so far as may be necessary, and send her to a hospital or clinic where she would be efficiently treated.

11,601. Do you think in such a case as that it is the doctor's duty to explain to the woman the nature of the disease she has got, even if it might mean reflections on her husband?—That is a very difficult question. If the person does not ask for information, the important point is to see that she is cured; but I think if she asks for the information she ought to be given it.

11,602. Then you go on to the question of notification?—Yes. I have considered it a good deal.

11,603. You have come to the conclusion that any notification by name will defeat the end in view, and

therefore we have to get all material for identification identified by number only. You think that any notification other than by number would be disadvantageous?—Yes. I suppose notification can have only two objects: the supply of accurate information with regard to the prevalence of the disease, and the security that it is properly treated, or that the public is protected, or something of that kind. I do not think notification of diseases of this sort would be complete if given by name. I think it much more likely to be complete if given anonymously; still more if it involved any action on the part of the authorities which enforced treatment. I believe that would be very much resented. In order to avoid compulsory treatment patients would probably go to any unscrupulous person who would not notify.

11,604. As far as the women are concerned, for example, in your own hospital, they are practically notified. That is to say, you book them by names, I suppose, and the disease is assigned to the name?—Yes, they are not notified to any public authority.

11,605. No; but I should have said they are recorded by names?—Yes, they are recorded in the books of the hospital by names. They are not classified into cases of gonorrhœa or syphilis. It would require an expert to look up the cases and realise which they were.

11,606. But still, the records of the hospital do contain that evidence; because you have made use of it in these figures?—Quite; only it is not available to anybody.

11,607. Then you think there is no reluctance on the part of people coming to a hospital where their disease, however unpleasant, and to being recorded; but as regards private practice, such a record or notification to any public authorities would be undesirable?—I think the practice of a hospital and private practice are very much on a par. I think the patients who come to a hospital come with precisely the same confidence as the private patient goes to his doctor; and although they know records of their cases are kept, so is the private patient quite aware that notes of his case are kept, and I think it is much the same thing. Notification to a public authority would be a further step on the part of hospitals or private doctors.

11,608. If it were done either by the hospital or the private doctor, it would be a deterrent to the patient going to either of them?—I think it would.

11,609. He would be afraid of the consequences of the public authority knowing?—I think so.

11,610. You suggest that all patients under treatment should be given definite instructions. Do you think it is obligatory upon all institutions and all doctors to give every patient, who is detected as having one of these diseases, a card in which all necessary information should be embodied?—Yes, I think they should be instructed either by card or by personal instructions.

11,611. Both would probably be the best; but as verbal instructions might sometimes get forgotten, would it not be a good thing to have the rule at all institutions like yours, that this information should be given to every patient who is treated?—I think it would be quite good.

11,612. Then you turn to the question of nurses, your nurses, for example; are they not fully instructed in regard to details they ought to know with regard to precautions?—No, I do not consider they are. Until a few years ago they had no instruction at all. They had courses of lectures of surgery and medicine, but venereal disease did not come in in any way. The matron asked a few years ago that I might give two lectures on diseases of women, and I suggested to her it might be useful if one of them were devoted to the nursing of venereal disease, and she agreed. But it is not at all general for nurses to be taught; not very long ago there was a conference of matrons from all over the country in London to discuss whether nurses should be taught the details of venereal disease, and I was very glad to find it is becoming seriously considered by the matrons of hospitals, and most of them are coming to the conclusion that nurses ought to be

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taught; but it is quite a recent thing. I have not very accurate information about that with regard to London hospitals, but I do not think the teaching is yet made at all complete for nurses.

11,613. Would one lecture suffice to intelligent nurses to instruct them as to the precautions necessary for their personal safety?—No, I think not, because I doubt if any set of people remembers a thing told them once. It is probably necessary to tell them several times from several points of view.

11,614. Reiteration is the mother of conviction, as somebody said. Turning to the question of the instruction of young people generally, have you formed any definite idea as to the age, and the kind of instruction to be given?—Of course I think it is an extremely difficult subject. Personally, I think that the earliest kind of instruction cannot begin too young, because young children accept things that are told them in the most absolutely simple way. I do not mean anything pathological, but I mean to say questions of sex hygiene should be taught the children as they ask it. I do not think children should be put off with answers obviously untrue. I think they should be told things naturally and simply from the beginning.

11,615. Quite young children, as soon as they begin to ask questions?—I think so; on the same principle that children are answered questions on any subject. They are told things in a different way from adults; but they are told something which is not untrue about most subjects. I see no reason why they should be told things which are untrue about these subjects.

11,616. Then at what age would you think it desirable to instruct young people as to the nature and dangers of venereal disease?—I do not think the same age would apply to all classes. I think the more sheltered classes remain practically children and could not be taught very well until a very much older age than children of the working classes. These children, through overcrowding at home, and going out to work at an early age, need to be taught things much younger than the more sheltered young people.

11,617. But not so young that the gravity of the warning would not impress itself?—No; I should think that, roughly speaking, the age at which boys and girls go out to work should be the time they ought to be taught.

11,618. When they get away from such protection as the home may afford?—Yes, when they begin to be responsible to themselves alone, at whatever age that may be. I think they ought to be taught not only then, but before, on questions of sex generally; but I think then they ought also to be taught of the dangers of disease.

11,619. Then do you think this kind of instruction should be given by the education department of the State in primary schools?—I suppose it would have to be given in some sense under the auspices of the education department; but what agencies they would co-operate with to get it done is another question, is it not?

11,620. I suppose voluntary agencies acting in co-operation with the education department?—I think very carefully chosen voluntary agencies. I think that the instructors should be medical people.

11,621. You think you would restrict it to medical people?—If you are discussing the second type of teaching, yes. My own opinion is that medical people ought to give it.

11,622. Give it by lectures, at which an assemblage of a large number of people is a good thing?—I do not think large companies would be very good; I think it should be given in smaller companies.

11,623. And would give just the same instruction in the shape of warning to girls as boys?—Certainly, I should. I am quite convinced that instruction to girls would be the very greatest safeguard. That I should like to emphasise very strongly; because I have met with very many cases of girls who felt no restrictions from any other cause who would undoubtedly have been safeguarded had they known the danger of infection by disease. It is the kind of thing which would be a far greater deterrent than even the difficulty of having a child to support, or any shame that

may attach to the girl or the difficulty of obtaining work. None of those things, I am quite convinced, would be as deterrent as the possibility of contracting disease.

11,624. You have come to the conclusion that a great deal of the spread of infection is due to pure ignorance?—I think so.

11,625. (*Dr. Newsholme.*) I think these statistics you have given us were confined to the gynaecological and maternity departments?—Yes, they were.

11,626. You have, of course, many other patients in the Royal Free Hospital?—Yes; it is a general hospital.

11,627. Do you know if it is likely that the percentage of cases of gonorrhœa and syphilis would be much smaller in those departments or not?—I think it is very difficult to say. There might be patients who were suffering from gonorrhœa and syphilis, but were in the wards of the other departments for some quite different intercurrent disease, so that it is would be difficult to form any estimate.

11,628. In actual fact your inquiry has been limited to the gynaecological and maternity departments?—Yes, it has.

11,629. You give the percentage of syphilitic and gonorrhœal cases among the out-patients and in-patients together. I worked out your figures for each of these diseases separately for the in-patients and out-patients, and the result is rather interesting. Taking first gonorrhœa: the percentage of certain gonorrhœa in-patients was 3·7, and among the out-patients only 7·4?—Yes; I know it is very much higher.

11,630. More than double; so that a larger proportion of gonorrhœal cases were admitted and treated than of out-patients?—Yes.

11,631. I suppose that was owing to the fact that many of those were cases of salpingitis, and so on?—Quite so.

11,632. Then, taking the maternity and gonorrhœal cases together there were 18 per cent in-patients and 7·9 out-patients—again rather more than double?—Yes.

11,633. Then taking syphilis, the proportion of out-patients and indoor patients was the same, 2·2 per cent. That is of certain cases?—Yes.

11,634. Taking certain and doubtful together, the out-patients were 3·5 per cent. and in-patients 2·7 per cent.?—Yes.

11,635. I imagine that means, when the patient got into the hospital you had better facilities for examination and a larger proportion recognised?—Yes, that is so. That is partly so. We cannot expect the pathological department to do work so completely—at least we have not been able in the past as completely—for the out-patients as the in-patients. There is another point. When a patient comes in and is operated upon, there are possibilities of getting material for examination then, which there are not while they remain out-patients.

11,636. Your percentage for the gynaecological in-patients suffering from gonorrhœa is very much smaller than some other figures which have been published?—It is, I know.

11,637. Some of them give nearly 50 per cent of gynaecological operations owing to venereal disease?—Yes.

11,638. Can you give me the explanation of that? Is it that you get a different class of patient?—Possibly; but I think if you have a great variety of statistics you find they vary enormously. Some little time ago I worked out the average percentage given by a very large number of gynaecologists, and it worked out that the total percentage of gonorrhœal cases, taking all gynaecological cases together, was somewhere between 10 and 20 per cent.; so that I recognise that the figures I have given are lower than the lowest average.

11,639. Taking your certain and doubtful gonorrhœal in-patients, it was 17 per cent. or thereabouts?—That very much corresponds with the average of a very large number of observers.

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11,640. But it is not so high as some figures which have been published?—No. Very much higher figures have been published; but if one takes the average of all from the more important clinics, I think it works out between 17 and 20 per cent.

11,641. I suppose if a hospital got a reputation for operating for salpingitis and so on, that hospital would be likely to see a much higher percentage of gonorrhœal infection?—Yes.

11,642. Take the Women's Hospital in Soho Square, that is the kind of hospital that would show a much higher percentage than the Royal Free, which is a general hospital; would that not be likely to be so?—I do not think it would be likely, because it would be a hospital for diseases of women. Of course the numbers would be smaller in the department of a general hospital, but it would be the same thing. There would be no special reason why it should be higher unless the hospital for diseases of women happened to be in a neighbourhood where they get a high percentage of gonorrhœal cases coming to the hospital.

11,643. I was going to ask that question. Is it not likely your hospital receives a much higher proportion of respectable married women than some other hospitals from which statistics have been collected?—Yes, I think it does.

11,644. And that would lower your percentage of gonorrhœal cases very considerably?—Yes, it would. Practically all our gonorrhœal cases are cases of infected married women. The cases are quite few really of any women of the prostitute class—extremely few; and then they are what one would call the quite irregular class.

11,645. (*Canon Horsley.*) Where do they go?—I do not know where the majority go.

11,646. I suppose they have some hospital they frequent more than others?—I believe a great many of the younger women go to the Harrow Road Hospital.

11,647. (*Dr. Newsholme.*) Turning to your maternity statistics, they work out that a very high percentage of stillborn children are owing to syphilis?—Yes.

11,648. You would not regard those figures as exceedingly high?—No, I do not think so.

11,649. The women your medical students attend are usually married women?—Practically all.

11,650. So that a very large percentage of stillbirths, nearly half we might say, is due to syphilis?—Yes.

11,651. Is any action taken with regard to those stillbirths? Do you arrange for any subsequent treatment or examination at present?—Yes, we always recommend the mother to go to the hospital for treatment. Now we always have both the fœtus examined, which is perhaps the easiest, quickest and most conclusive way; and also, if the fœtus should show spirochætes, we have a Wassermann reaction done for the mother. In that case the mother attends, and is either treated in the out-patients' department, or, if she can be admitted, she is. But we really have not beds enough to admit people for salvarsan treatment.

11,652. You have nearly 600 maternity cases per annum attended by your medical students?—Not as many as 600.

11,653. No, 366, I should say; nearly 400?—Yes.

11,654. Do women come up to book their confinements?—Yes, there is a maternity out-patient clinic twice a week.

11,655. At that time is anything done to see whether they are syphilitic or not, or have you not yet begun that system?—We have not begun that. If they have had a very striking series of miscarriages before coming, then we should have a Wassermann done; but apart from that we really have not had facilities for getting so many cases done.

11,656. Who sees the women when they come up; is it your lady almoner or the resident officer?—No; there are two resident obstetric assistants, and they see the cases when they come up. I go down one day a week. I really go to see any important cases, or to teach the students for an hour.

11,657. But you think it would be a very good thing at that time to arrange for a complete history of the mother to be obtained as regards past miscarriages?—That always is done.

11,658. And beyond that, if any suspicion arises, to have the proper tests made in order that the stillbirth might be prevented?—Yes.

11,659. Then you press further for pathological examinations of these fœtuses?—Yes.

11,660. You would have that done at the hospital. I suppose?—Yes.

11,661. That means a very expensive matter, if it is done for all stillborn children in every clinic, does it not?—No, it is not anything very expensive. The numbers we were considering included 40 stillbirths and that is over a period of five years.

11,662. It is not really very many?—It is not very great, and also it does not take very long. I mean it is very simple to put up the spirochætes on a dark field to examine, and they are very readily found in a syphilitic fœtus.

11,663. You mentioned making it a duty to do this; would you like to have it imposed on the officers of your hospital that it should be a duty that all these stillbirths should be examined?—With regard to the hospital, I have made it such, absolutely.

11,664. You have already made it such?—Yes.

11,665. But it is very important that action of that kind should be continuous?—Yes.

11,666. And many hospitals with more voluntary arrangements might not continue it after a while?—Yes. I think they will find it almost essential to keep up-to-date in their methods of treatment.

11,667. Turning to another point, you mentioned the importance of avoiding infection due to lack of training of the nurses; I believe there have been some rather serious epidemics of gonorrhœal infection in children's hospitals by passing infection from napkin to napkin. Have you heard of these at all?—I could not give any accurate information about that.

11,668. It is an accident that does occur?—Yes.

11,669. And sometimes it occurs on a very considerable scale between children owing to the non-sterilised napkins being passed from child to child?—I have not really any definite knowledge about that.

11,670. Do you think we could obtain information as to that from any sources in this country?—I should think from the children's hospitals.

11,671. But am I right in suggesting that it is a recognised danger, which in many quarters has been overlooked?—I must say that I really do not know about it. I should have thought it was not a very great danger; because in any hospital one would expect that the napkins would at least be boiled.

11,672. I thought possibly you might have further information than I possess?—I know nothing about it, I am afraid.

11,673. With regard to instructing nurses, do you mean instructing them in the medical diagnosis of these diseases, or merely instructing them when they know it is such a disease that they should take certain precautions?—Yes. I mean I think nurses ought to be taught the nursing of venereal disease, just as they are taught the nursing of all other diseases. Take the infectious diseases, for instance. A nurse thoroughly understands what special precautions ought to be taken in scarlet fever, and she knows what different precautions ought to be taken in enteric. I think she ought also to understand the special nursing details in venereal disease.

11,674. Supposing the doctor does not wish the nurse to know, lest she should be indiscreet and tell the patient, what would be the right thing in that case; is it not better to give her general information as to dealing aseptically with all discharges rather than that she should be excessively careful in a given case?—I think it is very difficult to expect the nurse to nurse well unless she knows really exactly what she is trying to do; and my own opinion is that a nurse ought to understand. I really think a nurse ought to know what case she is nursing, or if she does not know that, then the doctor himself ought to tell the nurse exactly what precautions to take.

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11,675. So that either the nurse should know the nature of the disease, or, short of that, the doctor should inform her of the exact precautions she should take?—Yes; I think it is so important a nurse should know. A doctor does not always think of the practical details, and perhaps does not remember a nurse is going to use douche cans, and so on. Although a nurse is taught generally to be aseptic and not use one patient's things for another, I think she needs extra warning where there is serious danger of infection.

11,676. It was suggested to us that a nurse who knows a given case is venereal in character might justifiably inform the patient without the consent of the doctor?—Of course, I think nurses want educating very much in professional etiquette. I think a nurse ought to feel it just as high a point of honour not to give things away to a patient as a doctor does.

11,677. The question as to whether all hospitals should be equipped for doing these tests was asked. I suppose you were speaking more particularly of the great hospitals when you said yes. There are many country hospitals and many minor hospitals in London which would be more economically and probably more efficiently served from some central laboratory?—Yes, in that case; but they would need facilities somewhere.

11,678. Undoubtedly; but presumably if general practitioners can be served from laboratories which are not in their own house, so these smaller hospitals could be served from laboratories which are not in the hospital?—Yes.

11,679. One further point arising out of that. How are you going to persuade the doctors to send their doubtful material to those laboratories? Is not that one of the main difficulties in the situation; that they are very busy and do not take the trouble to collect the samples for clearing up their diagnosis?—It is a difficulty; but if the information can be got gratuitously, I think some of the difficulty is got over.

11,680. Some of it, but does that suffice? From my own experience doubtful typhoid fever not infrequently is attended by a doctor for a fortnight before he thinks of having blood taken for a Widal reaction?—Yes; but the more this kind of thing is urged on doctors the more it becomes generally spoken of and so on.

11,681. Can you think of any means for increasing the use of these facilities by doctors?—It makes it very much easier for the doctor to treat his patient efficiently, and therefore he gets a reputation for being good at his work, and with practically no trouble to himself.

11,682. Would you recommend he should be paid a fee for sending a sample? That, I may tell you, is done in Glasgow; not only for sending a sample, but also for supplying certain other information about the case, not including the name?—If he is asked to send other information so that statistical work may be complete, then I think he should be paid a fee.

11,683. With regard to implication of notification involved in having a hospital register, you draw an important distinction there; that the information was merely for the hospital itself, and that the information did not necessarily and would not, as a matter of fact, pass on to anybody else?—Yes.

11,684. But there would be no objection whatever to the statistics of that hospital being utilised for wider purposes, so long as individual cases were not named?—No, not in the least.

11,685. So that, as far as all the hospital cases are concerned in this country, without compulsory notification one could get to know the amount of syphilis which was being treated in a given year in that way?—Yes.

11,686. Roughly; because as you know there would be an overlapping of hospital treatment, and so on?—Yes, and of course the accuracy would depend very much on the methods adopted in the hospital, and how complete.

11,687. As to the register and so on?—Yes; it would depend on many things.

11,688. I am afraid we must take it many of the hospital registers are not well kept—the list of patients and so on?—Yes, and the note-taking varies very much.

11,689. That is to say, the first entry of diagnosis may not be very accurate; it may be revised subsequently. Is that what you are speaking of?—Yes; the diagnosis may really give what was arrived at, but so much depends on the way the notes are kept; as to whether in looking up the notes for evidence, you can find clear evidence in the notes that the diagnosis was based on sound grounds. They may have been, but when you are coming to look up the notes as evidence, it depends on the individual note-taker.

11,690. You would really have to take the entry of the cause of the disease in the name register?—Yes. Of course, if it were the custom of the hospital, as it probably would be in the case of all great hospitals, to have the proper bacteriological test taken, that could be checked always by careful comparison of the notes in the pathology department with the notes of the case.

11,691. (*Canon Horsley.*) I want to take you a little further than Dr. Newsholme did about the statistics. When I first took up your paper I thought your average was the lowest I had seen anywhere; but now, on comparison with others, you rather bring it up to 20 to 25?—For the in-patients.

11,692. Yes, especially among the diseases of women?—Yes.

11,693. One comes across such very great varieties of statements. Here is one, for example: "There are 'medical authorities who believe that of cases of 'women's diseases as many as 90 per cent. or even '95 per cent. are due to gonorrhœa'"?—I think that is very extreme.

11,694. These things are printed; and when people see them in print they say it must be true.

11,695. Then it goes on, "A great authority on 'gonorrhœa, a doctor, states that three out of five 'married women are infected with gonorrhœa.'" Would you accept that?—I should think that that is excessive too; but it is very difficult to say, because in such a vast number of cases of gonorrhœa no one has an opportunity of examining them at a time when it can be said with certainty.

11,696. That is taking the general population, of course?—Yes, quite. When the stage is passed of superficial infection, then it is extremely difficult to say that the inflammation of the internal organs remaining originated in gonorrhœal infection and not in some other infection.

(*Mr. Lane.*) These figures are from America?

(*Canon Horsley.*) Yes. There are some very strong figures quoted in this book. I wanted to get at an estimate of their comparative value.

11,697. With regard to the difference between notification for statistical purposes and notification for hygienic purposes, the former is easier, but the latter is more desirable and also of more importance apparently. You know in some cases the statistical notification can be made daily; I mean in Christiania, for example, they got the doctors to do it once a month, and now, since July 1912, they send it every day. I suppose it would be possible elsewhere?—It would be a great task, I should think.

11,698. They do it there; but doctors in other countries do not seem so able to do what they are asked or told. In Berlin, for example, we were told that doctors were very strongly asked to send in statistical information only, and only 52 per cent. of them did. In Christiania they do it every day, having for some years done it every month. If they are supplied with cards it is not much trouble at the end of the day, if there are two cases or whatever it is, to put them down and post the card?—No.

11,699. You seem to think that the warning given to lads and young men ought to be given only by medical men and women?—I think it would be desirable; certainly at first, at any rate.

11,700. Of course every clergyman has to do that more or less. Suppose I have a lad in my village who is going into the Navy or Army, or a factory at

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Maidstone, and I impress upon him first of all the necessity of keeping himself pure, then I go on to say: "But if you will not do so, I warn you that there are certain very unpleasant consequences," it does not require very great medical knowledge to give him that warning. I do not want to enter into details as to how it is going to affect him, or how he is going to find a cure; but to warn him of the penal consequences of immoral conduct is surely in the competence of the clergyman as well as of the doctor?—Yes. I was thinking the first part of your warning would probably come with more weight from the clergyman, and the latter part from the doctor.

11,701. As a matter of fact I have had doctors send lads to me to be taught, and I have sent lads to doctors to be taught; but in the majority of cases where you have all the lads of the village, and you prepare them for confirmation, just at the time they are leaving school, or have left, you would be failing in your duty if you did not get the parents to teach them, or, as the average father generally says, "Do it for me." In that case I do not see the precise necessity of special medical knowledge?—I think the boys would be much better equipped if they were told a little more.

11,702. A little more frightened, you mean?—No, I do not say frightened; but if they were told a little more about the disease, it would make them feel their responsibility.

11,703. Quite so. I should say, "You may suffer from a painful disease which may affect you the rest of your life, and make your life a misery," and so on. One does not want to go into text-book details about it?—No. But I think a medical man could make clear the ultimate consequences. I think there are many things which would appeal to a boy's higher nature better. Really there are very few lads at that stage of their career who would not be very much affected by the fact that they might condemn the woman they ultimately marry to chronic invalidism, or might destroy their children, or give them all kinds of things to suffer from. I think it would appeal to a boy very much, even more than the question of painfulness to himself. I think if the whole widespread complications of the disease were put before him, his patriotism and that sort of thing might be invoked. He might feel that he ought to take a share in keeping his nation fit, and so on. I think there are a great many details which might be told him with advantage, which would be a much greater incentive. It is very difficult for anyone but a medical person to tell those things in just the kind of way which would be most effective.

11,704. (*Dr. Mott.*) Is it a fact that as a rule the women who come do not know what they are suffering from?—The majority do not, but some suspect.

11,705. Do those that suspect ask you the question?—Some do.

11,706. And then you tell them?—If they ask. If they are suffering from an infectious disease I tell them.

11,707. Do you tell them more than that unless they press you?—One would never presume, I think, to tell anyone how they obtained the infection.

11,708. I did not mean that, that is for them to find out; but I mean to say, if they asked you whether it was syphilis or a venereal disease, or some bad disease they might call it?—I should tell them.

11,709. Then with regard to out-patients, I suppose you have the same system at the Royal Free that they have at most hospitals, a medical officer who is appointed for a time, is he not—an obstetric gynaecological officer?—For the out-patients?

11,710. Those attending the maternity department?—Yes.

11,711. Then I suppose he is responsible for the diagnosis in these cases?—It is a woman at the Royal Free.

11,712. I meant that?—Yes, in most of them.

11,713. You could not see those cases except occasionally, I suppose?—I should only see them if there happened to be some special thing.

11,714. So that the majority of the diagnoses of the out-patients' department depend on this appointed medical officer?—Yes; except where pathological examination has been made.

11,715. But it is only recently that a pathological examination has been made?—Yes, of the fetuses; but, of course, in some cases of the women.

11,716. The appointment is for six months, is it not?—The senior officer who is really responsible is for a year; but sometimes they hold it for two or three years.

11,717. Then of course the personal equation does come in a little, does it not?—Yes, it does.

11,718. And that may account for the very low percentage of the 28 premature stillborn children possibly?—I think so. That is why I judged that in going carefully through the reports myself.

11,719. It does seem rather low?—Yes. Many of these cases of premature children were not diagnosed at all I think, because there was not a very efficient obstetric assistant on at that time, and I found a great many of those cases not diagnosed.

11,720. I have had exactly the same difficulty. Then with regard to the women who had these stillborn children; is it not your experience that many of them will tell you, although you diagnose syphilis from the history, that they have never ailed at all, and show no signs on the body whatever?—Quite.

11,720A. And a Wassermann reaction in those cases would be positive and tell you short of clinical symptoms and signs, would not it?—Yes; we have had several cases who have given a Wassermann reaction without any clinical signs at all.

11,721. Then I suppose it is your experience that you would find a woman would give this history of miscarriages, then these stillbirths and then perhaps a child born alive and dying shortly after birth?—Yes; that is a very common history indeed.

11,722. You know that it is stated that the early dead embryos do not give the spirochaetes?—The miscarriages you mean?

11,723. Yes?—It has not been done very extensively yet.

11,724. No, it has not; but Dr. Routh stated that the other day, which seemed to me rather extraordinary; but possibly you think it has not been done thoroughly enough at present?—I should not like to say. It has not been done very extensively.

11,725. What method are they adopting for demonstrating the spirochaetes?—Simply on a dark ground.

11,726. Just an emulsion made?—Yes.

11,727. Have not you in your experience met with a good number of cases of dual infection; that is to say, gonorrhoea and syphilis?—Yes, I have come across it.

11,728. But you say you do not get many cases of prostitutes?—No.

11,729. Among prostitutes you will find 50 per cent. will give evidence in the body of dual infection?—We get practically no professional prostitutes, though we get a few of the irregular ones.

11,730. Then do not you think it would be very useful if you were undertaking a research of this kind to take the blood of the umbilical cord of all your maternity cases, and have a Wassermann done upon it?—Very useful indeed.

11,731. Then you would get a percentage probably, and it would not do any hurt to anybody, and they would know nothing about it?—No.

11,732. It is very simple, is it not?—Yes, very simple.

11,733. Perhaps you might do that?—We may be able to do that directly we get the new pathological block; at present we have hardly facilities.

11,734. Then have you in your experience met with any cases of innocent infection?—Of gonorrhoea?

11,735. Yes, of gonorrhoea or syphilis?—Yes, I have of both.

11,736. In nurses?—Yes.

11,737. Then can you tell me if midwives are instructed sufficiently in the dangers of venereal disease?—No, I do not think they are. Certainly a few

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years ago they were not supposed to know anything about it.

11,738. It is very important, is it not?—Very important.

11,739. They might get a chancre on the finger and communicate it to a number of people?—Quite.

11,740. Then with regard to the Wassermann reaction, you think it would be desirable that the laboratories of the hospital should be used; but if a municipality established an institute it would be very useful, would it not, in connection with the lying-in wards of the infirmaries where large numbers of women are delivered?—Yes. I do not think it matters very much how the facilities are arranged. I think that the hospital is a very useful unit in the middle of municipal work.

11,741. Quite so; but would you make the hospital laboratory do this work for the infirmaries in that district?—I think it might be done so. What I feel about the hospital is, that you are much more likely to get the results that come from doing large quantities of this work made scientific use of. It would have to be a very much enlarged hospital laboratory. I think it would be an advantage.

11,742. Correlating the clinical experience with the laboratory experience?—Yes.

11,743. But the Lister Institute are undertaking work for Chelsea?—Of course, that is excellent, and it is quite a different thing.

11,744. (*Mr. Philip Snowden.*) Where is your hospital situated?—In the Gray's Inn Road.

11,745. To what social class mainly do your patients belong?—Most of them are very poor patients. If you ask with regard to the maternity department, I should say they are, roughly, people who are earning about 1*l.* a week, or less; some over, and some less. Of course the people in the hospital itself are more varied, because they are not only drawn from the out-patients, but they are sent by doctors from various parts.

11,746. Are your maternity cases mainly those of married women?—Yes.

11,747. Have you a proportion of illegitimate cases?—They are practically all married women.

11,748. I presume from the statement you made that it is difficult for the women to come in the morning, that they are working?—Are you speaking of the maternity department?

11,749. I am speaking now of general patients?—The gynaecological patients?

11,750. Yes?—Yes; many of the women are working. I think we should get a very much larger number of patients who were going out to work if we had an evening clinic. Those are the ones that are shut out.

11,751. Then the diseases from which they are suffering are not so serious as to prevent them following their employment?—When you say that, it includes almost everything. You see women will work when they are very seriously ill indeed; it goes for nothing.

11,752. Do many of the patients come to you suffering from these diseases in the early stages of infection, very soon after infection?—A few do; but, as a rule, they do not come within a week or two, which is the thing one would desire.

11,753. I believe you have a private practice?—Yes.

11,754. Might I ask what is the social class of your private patients generally?—There again it really varies a great deal. I should say mostly the upper middle classes.

11,755. The reason I put the question was this: I wanted to lead up to the question as to whether you think these diseases are more common amongst working people than amongst people who belong to the middle and upper classes?—There is a great deal among the middle and upper classes. One comes across a great many cases of gonorrhœa.

11,756. I gather from what you said in reply to the questions put to you by the Chairman, that it is your opinion that the figures you have given us as to the association of these diseases with certain other maladies does not represent the whole of the results

of gonorrhœa and syphilis. I understood you to say that you suspected, at any rate, that there were patients suffering from diseases caused either by gonorrhœa or syphilis, where you could find neither by the Wassermann test nor by any other methods you applied evidence of the existence of the germ of either syphilis or gonorrhœa. Was that not so?—I think it would be very difficult. Unless in syphilis you could get a Wassermann test, I do not think one would be justified in saying the patient suffered from syphilis if there were no clinical evidence either.

11,757. But you did not mean to infer then, that if there were no what I might call response to the tests that you applied to the discovery of the germ of syphilis or gonorrhœa, you would be justified in assuming that the obvious disease was caused by gonorrhœa or syphilis?—No. In the absence of the tests giving a positive result I do not think one would entertain the idea, apart from all clinical evidence, too. I do not think perhaps I quite gathered your question.

11,758. I might have misunderstood your answer to the Chairman's questions; but it might be well if, when you get the proof of the evidence, you were to look very carefully at the answers bearing on the point I am trying to get out. But I certainly did assume from your replies that you were of opinion that there might be a great deal more cases associated with gonorrhœa or syphilis than those included in the figures given in your paper?—Yes, quite so; for instance, the Wassermann test has begun to be applied to groups of cases which are not what one would call exactly suspected cases of syphilis, and never have been suspected as being such, and it has been found that a positive reaction has been given in a large proportion.

11,759. Do you take it for granted that when a positive Wassermann reaction is shown that is absolute evidence of the prevalence of syphilis?—No; there are a few fallacies that you must exclude.

11,760. There are certain other conditions which occasionally will give the test and which you must exclude?—I do not think that any pathologist would say that the Wassermann alone is absolute.

11,761. Even if it gives a positive reaction?—No. There have been found certain other conditions occasionally which give it. But those can often be excluded, and then you accept it as absolute.

11,762. (*Dr. Mott.*) Could you name them?—There are certain suppurative conditions, are there not, which give a Wassermann occasionally? There are certain exceptions made. I do not think pathologists will accept the Wassermann as in itself absolute, though for all general purposes it serves as such. Of course, whether the cases that have given it—non-syphilitic cases—were really cases of syphilis or were given through some other cause, I suppose it is a question. I think there is a certain reservation generally made with regard to the Wassermann reaction.

11,763. Only with regard to the test?—It might be a question of fallacies in the test?

(*Dr. Mott.*) It might be that.

11,764. (*Mr. Philip Snowden.*) If the Wassermann test were negative you would be less inclined to accept it as an accurate test, if there were other evidences which led you to believe there were syphilis?—If the test were negative I think you would be very careful in diagnosing syphilis.

11,765. You stated in reply to Dr. Mott that you had many cases where the patients told you they were not aware of ever having suffered from either gonorrhœa or syphilis?—Quite.

11,766. And they showed upon their bodies no marks at all of the results of the disease?—Quite.

11,767. On what grounds do you assume then that these people have at one time or another been infected by one or other of these diseases?—Because the cases which were under discussion then were cases in which the women had miscarried two or three times, or had had one or two miscarriages, a still birth, or possibly then a child dying within the first four weeks of life,

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Many of the cases which do show definite kinds of syphilis have that experience.

11,768. But is it not possible that those results could come from something else than syphilis or gonorrhœa?—But then those cases give a positive Wassermann reaction. That was the point: that they give a positive Wassermann reaction although they have not any other illness.

11,769. But you have admitted already that the Wassermann test is not infallible?—No; I say with very few exceptions.

11,770. Do you not think it would be possible to find in association a positive Wassermann test and those miscarriages to which you referred, and yet, in combination, these two do not really prove the presence of syphilis or gonorrhœa in the body?—It could be, of course, verified by the examination of the fœtus.

11,771. Going back again to Dr. Mott's question, is it possible for a person to have been infected with gonorrhœa or syphilis so slightly as never to have been aware of the fact?—The point is that you get these patients who give us no history whatever and show no external signs. But patients are singularly unobservant. I think all we can say is that we have not got it; we can only state the negative point.

(Mr. Philip Snowden.) But if the infection were so very slight as not to be noticed by the person, is it likely that very serious consequences could afterwards result from such a slight infection as that?

(Dr. Mott.) May I answer that question? The reason I asked the question is this, that I have pedigrees of a very large number of cases of congenital syphilis in which the signs on the body of the children were so absolute that there could be no possible doubt about it, yet the mothers have told me they have never ailed at all, and showed no signs on the body. Yet, when you did the test, they gave a positive Wassermann reaction, and you found the children gave a positive Wassermann reaction also. Although the body has resisted the organism, it has not been sufficient to prevent the infant developing the spirochætes and producing these very grave symptoms. That is why I asked the question.

(Mr. Philip Snowden.) It is not for me to express opinions at this stage; but I think a layman might be pardoned for assuming that in a case like that there is a great deal of assumption.

(Dr. Mott.) I do not think there is any assumption. I cannot admit that.

(Witness.) I do not think the difficulty is as great as it appears, because after all a disease is always the resultant of two factors: the infection and the resistance of the patient.

11,772. (Mr. Philip Snowden.) Might I have an answer to my question as to whether it is possible for a patient to be infected with gonorrhœa or syphilis and the infection to be so slight that it escapes the patient's knowledge altogether?—The patient's knowledge?

11,773. Yes?—Yes, because some of the patients are most extraordinarily unobservant. They will tell you that there is nothing the matter with them when you find most extensive lesions.

11,774. But are not the first effects of gonorrhœa such that a person could not be suffering from it without having to endure a considerable amount of pain and inconvenience?—Yes. But there are many people who are most curiously unobservant of inconvenience and pain, and years after may quite well have forgotten it.

11,775. I want to put one further question to you arising out of that. We must assume that in such cases the persons have not undergone any medical treatment at all for it?—Yes.

11,776. And the symptoms of pain, discharge, and the like must have disappeared then, and at the time they come to you for some other ailment they are showing no signs of it; is that not so?—Yes.

11,777. Would one be justified in assuming that gonorrhœa can cure itself?—It is not exactly that gonorrhœa cures itself; but the patient's organism naturally at once resists the entrance of any sort of disease germ, and if the patient were in a fairly good

state of health I suppose it is conceivable that nearly every type of infection can be and sometimes is cured by the resistance of the individual?

11,778. Of course, I cannot speak to you as a doctor or in medical terms; but from what I have gathered, gonorrhœa is a discharge of matter accompanied by very painful inflammation?—Yes.

11,779. And would it be possible then for the discharge to stop and the inflammation to subside without medical treatment?—It would in almost all cases subside to a certain extent, leaving a less virulent but chronic kind of discharge which would be liable to be lighted up into an acute attack by all kinds of things afterwards; for instance, pregnancy will often light up an attack which has apparently subsided, so that it becomes an acute attack again. Gonorrhœa in particular is a disease which, whatever the appearance of the cure, it is very dangerous to pronounce cured, because the germs have a way of lurking just within the tissues, remaining in a latent state from which they can become active again.

11,780. You spoke of children who were infected with gonorrhœa. As a general rule what form does it take?—The cases I have seen most frequently are of infection of the superficial genital organs, or ophthalmia. I think they become infective simply from using common washing materials, or sleeping in the same bed with an infected person.

11,781. We have heard a great deal of evidence about the later development of syphilis. Are there later developments of gonorrhœa of a rather serious character?—In women most decidedly. If the disease is treated at once, as a rule it can be reached by local applications and very often cured; but if it is allowed to spread higher into the internal organs where you cannot reach it by local applications at all, it leads to very serious results, and very often necessitates the removal of the womb or its appendages.

11,782. Is it your experience that gonorrhœa is much more susceptible to treatment than syphilis?—More susceptible to treatment?

11,783. More easily treated and cured?—If it were taken in the very early stages I think it would be; but gonorrhœa is a very very difficult thing to cure when it has spread to the deeper organs.

11,784. You would say it is a curable disease if taken in time?—In many cases if taken in time; but it becomes very much more difficult to cure if it has gone on for any length of time—in women, and I speak purely of them.

11,785. Suppose you had a case brought to your notice within a week or two of infection?—It could probably be cured.

11,786. What length of time would the cure take, speaking of gonorrhœa?—It would take many weeks, probably months.

11,787. And in the case of syphilis, if the case were brought to your notice at an early stage, very soon after the infection, what length of time would it take?—There it is much more difficult. Of course, with regard to gonorrhœa it is very difficult to say absolutely, because, as I say, it appears to be cured and gets lighted up again. In either diseases it is difficult to say that an absolute cure is effected.

11,788. In the case of syphilis would it be a matter of weeks, months, or years?—If the salvarsan treatment is successful, so that there is no Wassermann reaction remaining, we are hoping that it may mean absolute cure. But in the older methods of treatment, even after apparently a complete cure, later manifestations have appeared many many years afterwards.

11,789. Is salvarsan a cure, or is it merely to destroy the possibility or likelihood of infection?—It is a very difficult question to answer with absolute-ness at the present moment.

11,790. Have you any experience of the use of salvarsan?—I have had a little. There is no question that salvarsan will very often prevent the infection of children if it is given to the mother in the earlier stages of pregnancy, when she is infected. I have had two cases of that kind where the mother had quite a virulent syphilitic infection, and became

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pregnant at the same time, and, after treatment with salvarsan, the child has been born perfectly healthy.

11,791. Have you formed any opinion upon the influence of alcohol on venereal diseases?—I should not like to express a very definite opinion. I think probably, as with all other diseases, it lowers the resistance of the individual.

11,792. Do you find much difficulty in getting patients to continue the treatment for the length of time that is necessary to effect a cure?—Yes; that is difficult, because directly they feel better they tend to cease coming to the hospital.

11,793. I understood you to say you would have some hesitation in telling a woman who was suffering from one of these diseases the nature of the complaint from which she was suffering, if she was a married woman?—If she asked, I should tell her. I think she should be told.

11,794. But you do not consider it to be your duty to do so unless you were asked?—No. The course I generally pursue is to give the patient all necessary instructions not to infect other people. I tell her what secretions are infective. But if she asks me I tell her.

11,795. Are you restrained in that at all by the present state of the law of libel?—I do not think it is a law of libel. It would not be in any sense, because one does not tell the woman about anybody but herself. You tell her if you know quite certainly she is suffering from a certain disease and she asks you. You tell her she is suffering from a certain disease, and do not go any further.

11,796. And leave her to discover the source of origin?—Quite.

11,797. But in view of the seriousness of this disease, do you not think that it would be a very great social service that married women should be acquainted in every case of the nature of the disease from which they are suffering, so that in case it has been contracted from a husband they should be able to take precautions in the future?—I think it is much more desirable they should know about their illnesses. I find not only in these diseases, but in many others, if you are going to enlighten a patient there are some patients who will say "I do not want to know." Patients vary most curiously in their desire to know or not to know about some diseases. Some wish not to know.

11,798. But are there not some things of such serious consequence to others and to the community at large, that people ought to be compelled to know whether they desire it or not?—In the case of these diseases, I think I said I should in all cases tell the woman the precautions to take in order to avoid infection, and the possible effects upon her children if she did not continue treatment, and so on. I should tell a woman quite carefully the necessity for treatment and the possibilities that might follow from not carrying out the treatment, and all the precautions she ought to take not to infect other people. That will lead her to ask what her disease is, if I have not hitherto told her. In the case of young girls who sometimes come to the hospital, possibly pregnant and infected with venereal disease, or possibly infected with venereal disease only, I tell them absolutely about the whole thing; because I think there there is the question of whether she is going to marry a particular young man, and so many people say because she is having a child she must marry the man. I take the precaution to tell her, because I think she certainly ought to know the whole of the facts if she is going to marry, and I tell her the type of man she is going to marry. So I explain carefully the whole of the facts of the case to her; exactly what it means to her, and what the disease is.

11,799. You are aware that under the law of France if a husband gives one of these diseases to his wife it is considered to be legal cruelty and affords grounds for divorce?—I think it ought to be.

11,800. You think it ought to be?—Certainly, I think it ought to be.

(*Sir Almeric FitzRoy (in the Chair).*) Is it not legal cruelty in this country? It is part of the law of England, is it not.

(*Sir Malcolm Morris.*) It is cruelty in the legal sense.

(*Mr. Philip Snowden.*) Yes; but unless the husband has committed some other offence than that the wife could not get a divorce.

(*Sir Malcolm Morris.*) Yes; desertion and cruelty.

(*Mr. Philip Snowden.*) There must be either desertion or adultery in addition.

(*Sir Almeric FitzRoy.*) In order to get a divorce that is so.

11,801. (*Mr. Philip Snowden.*) Now I want to put one or two questions to you about notification. What purpose do you expect to be served by notification?—It seems to me that the idea of notification must be to collect evidence as to the prevalence of disease on the one hand; and on the other, I suppose, to enforce such rules as will protect the community at large in the best possible way from the disease. But whether notification by name will ever serve that purpose I am extremely doubtful; I do not think it will.

11,802. Would you have the notification made to some public authority?—I would not have notification by name at all. I think it will prevent just the very things that we wish to attain.

11,803. Whether the notification be made by number or by name, would you have it made to a public authority?—To a public authority, by number, yes.

11,804. But what would be the use of the number unless you were able to identify the person by a number?—If any method of identification were given by a responsible person, then it must be by a medical man. The statistical value, of course, is great. You do gather the prevalence of the disease, and in succeeding years you gather what the effect of the methods that are being employed is having on the disease.

11,805. That I can see quite well, but I cannot see very much beyond that. We will assume that the notification by name or number has been made to a local authority. To what purpose would the local authority put that information?—I do not think that the notification in itself is going to do a great deal. As I say, beyond giving the statistical knowledge of the prevalence of the disease I do not think it will give anything else.

11,806. You do not think so?—No.

11,807. That is the extent of the service that you expect to be rendered by notification?—Yes.

11,808. It is going to give us statistics?—I think that is all. Personally I do not think that notification in itself is of value.

(*Mr. Lane.*) Might I intervene, as I have to go, sir?

(*Sir Almeric FitzRoy.*) Yes, certainly.

11,809. (*Mr. Lane.*) You were asked as to the degree of infection; as to whether a mild infection might escape unnoticed. But you would agree that the degree of infection does not at all influence the subsequent course of the disease?—Quite.

11,810. That is to say, that a mild infection of syphilis may be followed by very severe tertiary symptoms?—Certainly.

11,811. Another point was, could the disease escape recognition? The disease gonorrhœa may easily escape recognition?—Quite easily; because there are other organisms which cause very similar conditions.

11,812. And it may be perfectly painless?—Yes.

11,813. In the same way syphilis can also easily escape detection?—Yes.

11,814. Also from the absence of pain. You were asked some questions as to the duration of gonorrhœa, if it is treated early and efficiently; and I understood you to say it was a matter of some weeks?—Yes; I should say months in some cases.

11,815. Do you ever apply the abortive treatment of gonorrhœa; strong solutions of nitrate of silver?—Yes.

11,816. And have you not found that will clear up the disease in a much shorter time?—They very often will clear it up apparently in a few weeks; but I think the patients need to remain under observation, because

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gonorrhœa has such a way of recurring if it is not watched for a short time, that I should not feel the patient was safely pronounced cured without watching her for a few weeks or even a few months, and seeing her from time to time to see there was no recurrence.

11,817. In other words, the abortive treatment is not as effective in women as it is in men?—I do not think it makes absolutely certain that a recurrence will not be lighted up later.

11,818. One question as to the administration of salvarsan. I suppose that is given systematically at the Royal Free Hospital?—It is given, but of course nothing like to the extent it ought to be, considering the number of out-patients that come. Every case of syphilis that comes to the hospital does not get salvarsan treatment at the present time.

11,819. Have you found there are difficulties in the way of the salvarsan treatment of women?—No.

11,820. You have not had to cut down upon the veins, for instance?—Rarely. I think practically the subcutaneous method answers very well indeed.

11,821. The intravenous?—The intravenous.

11,822. And you have not met those difficulties with women?—Sometimes there have been a few cases where it has been necessary to cut down and expose the vein.

11,823. But the patients have not objected?—No.

11,824. Then as regards the instructions given to patients, do you think verbal instructions are very satisfactory?—No. I think written instructions are certainly better; but I think, of course, given directly to the patients themselves.

11,825. As a rule a patient, when he or she is told that he or she has venereal disease, is not quite in the mental position to take in all the instructions given?—No. I think it is very desirable that hospitals should have written instructions.

11,826. They should have a printed form?—Yes.

11,827. (*Mrs. Scharlieb.*) I was wondering whether you have any idea as to the relative number or percentage of syphilis in cases of miscarriage, abortion, stillbirth, and infants dying during the first weeks or first months of life. What proportion do they bear to the population that really lives and grows up, do you know?—I have not worked out any figures generally.

11,828. What is your impression?—Would you mind putting the question exactly again?

11,829. I will begin at the beginning. What proportion do you think the numbers of miscarriages, still-borns, abortions, and infants dying early, all added together, bear to the children that survive the first year of life?—A fairly large one.

11,830. Would you venture to say it was equal, or one-half, or one-third, or three-quarters?—I should have thought probably it would not be more than one-third.

11,831. Do you mean before birth, or do you reckon in also those numerous infants who die during the first few months of life?—I should say one-third.

11,832. Reckoning in all?—I should not like to go further. To be on the safe side, I think one might say it would be responsible for one-third. It might be more. It is very difficult to estimate that, putting a good many figures together.

11,833. We were told by another witness it was very advisable that women who need financial assistance should declare their pregnancy perhaps the fourth or fifth month, or something of that sort. Do you think such a declaration of pregnancy should be obtained in order to ensure the expectant mother having food and so on?—I think it would be a very difficult thing to get all cases of pregnancy from practical notification of pregnancy, would it not?

11,834. Yes, but not to a public officer. I mean notification to a doctor or a midwife?—In order to get assistance?

11,835. Yes?—That, of course, might be a means of getting it done. Apart from such assistance I think it would be very difficult to get the pregnancy notified.

11,836. You do not think that women would voluntarily come to notify their pregnancy if they felt they were in need of assistance?—I think they

might, and I think it a very important thing if it could be secured. I think that some measures which linked up pregnancies in the early stage with proper investigation and help of the mother would be a very great thing in the saving of infant life.

11,837. Then with regard to the examination of the products of conception, that is to say, of abortions, miscarriages, stillbirths, and so on; if you got evidence that one of these products was syphilitic, would you not wish to examine the other children of the family? Would you not wish to find out whether there was any other evidence?—Yes, I think for a complete examination. Do you mean of the previous children?

11,838. Yes; children already born who may have perhaps keratitis or syphilitic deafness, or other syphilitic affections?—Yes, I think it would be very desirable to examine other children; but of course in a good many cases this occurs at the beginning, does it not, and there would be no children?

11,839. But very frequently a man becomes infected in the middle of his married life. Perhaps his wife is ill, and while she is ill he goes astray, and then he infects her after they have had healthy children, and then you get a series of miscarriages?—Yes. Then, of course, they would not show syphilis.

11,840. No, they might not. You would examine the mother in order to protect her future children, but you would also examine the other children to see if they were showing signs of syphilis?—Yes, if there were such other children subsequent to infection.

11,841. Some children are more resistant than others, and live, although in an impaired state, with deafness or keratitis or what not?—Yes.

11,842. When you were surgical and medical registrar at the Royal Free Hospital, did you not find there were many cases of tabes, general paralysis of the insane, aneurysm, and so on?—Yes.

11,843. Did you connect them with the slighter infections, cases that perhaps had been slightly neglected?—I cannot say I obtained any evidence. There were several cases of aneurysm that I knew were syphilitic in origin, and of course the tabes was. In some cases there was evidence and in some there was none.

11,844. Is there an effort being made now at the Royal Free Hospital to thoroughly instruct the students in the diagnosis and treatment of syphilis and gonorrhœa?—That is under consideration.

11,845. It is not organised yet?—No; the definite instruction is not organised.

11,846. But you believe it is very desirable?—Extremely desirable.

11,847. Because to one person who can have the advantage of getting the assistance of an expert there must be hundreds of the population who have to rely on general practitioners?—Yes.

11,848. With regard to the instruction of midwives and nurses, that ought to be very much more thorough?—Yes. I do not think that that is done at all systematically yet, but of course during quite recent years the whole question of ophthalmia of children has been brought in. Midwives are very definitely instructed now as to the recognition of that. But as to venereal diseases as a whole, I do not think they are.

11,849. I was thinking of infants suffering from pemphigus, and from mucous discharges, and so on. Do not nurses run a great risk in kissing these children and handling them?—Yes; I think they need instruction on all those points.

11,850. Then with regard to gonorrhœa; talking about children having ophthalmia, must we not also remember they are liable to infect others in the family? If an infant has ophthalmia neonatorum, the other children playing with it, or even the mother or nurse rubbing their eyes may contract it?—Quite; and it is in those cases, I think, that nurses should understand that when dressing them they ought to have gloves to protect themselves, and so on.

11,851. Then, of course, you would advocate the instruction of the public as well as of the nurses and the students?—Yes, I would, most distinctly.

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11,852. (*Mrs. Creighton.*) Do you in any way discourage syphilitic patients at the Royal Free Hospital?—No, we do not.

11,853. They would be taken in just as freely as anyone else?—Yes, if they had conditions that made their treatment urgent.

11,854. Would you take in primary cases?—There are many cases that would be perfectly well treated in the out-patients' department, and they would be treated there. If it is necessary to give salvarsan, we always take them in for a night or two for that.

11,855. Can you explain at all why you think prostitutes do not come to the Royal Free Hospital?—I do not think it is at an hour which is very convenient to them. You see the diseases of women out-patient department is at half-past 9 in the morning. I do not know any other reason than that. I think prostitutes do not go as a rule to clinics. I think they rather shun clinics in the day-time. They think they become recognised. I think they are much more likely to go to evening clinics. But why I recommend evening clinics is not specially for the prostitute class, but it is for the large other class of women who become infected who could not be classed as the prostitute class at all, and are probably in employment all day, and therefore go for many many months untreated because they cannot leave their work.

11,856. I have been anxious to try and discover where prostitutes go for treatment. Could you give me any indication as to how we could get that information?—I should think you might be likely to get it through people who are rather in touch with the class themselves: I mean people who do rescue work, and that kind of thing.

11,857. Rather than on the medical side?—I think so.

11,858. Do you advocate a separate ward in hospitals for venereal diseases?—No; I do not think it is really desirable. I think the kind of case that comes into hospital for treatment can be treated quite well with proper care in an ordinary ward, and I think it is rather a pity to isolate these patients.

11,859. Have you it laid down now as a regular rule that in any case of a woman with syphilis or gonorrhoea her family history should be investigated?—Throughout the hospital?

11,860. Yes, and amongst the out-patients, too?—Amongst the out-patients her history would be taken as a matter of course with regard to the symptoms and with regard to her children, miscarriages, and so on, and notes of that kind. That kind of family history would be taken of every patient in hospital; but there is no special department for venereal diseases. Every patient comes under a general routine by which their histories are taken.

11,861. Then if you were convinced that a wife had been infected by her husband, have you any means by which the husband would be got at and put under treatment?—We have no special organisation for doing that.

11,862. Would any of you see the husband or try to influence him in any way?—Yes, in some cases we might.

11,863. But it is not a regular practice, is it?—There is no rule about it at all.

11,864. But you, yourself, would advocate it, would you not?—If we thought, or if the woman herself sometimes thought, she had been infected by her husband, we would advise her to get him to go to his doctor or the hospital for treatment.

11,865. But you would not go to the husband direct without telling the wife?—No, we have not done so.

11,866. Do you not think that ought to be done, unless the wife is told she has got her disease from her husband?—It is a very difficult thing in any hospital work to decide who is to do it.

11,867. Have you had cases of doctors or students being infected in the hospital?—I cannot remember any.

11,868. Do you think the cases of nurses being infected are frequent?—No, I do not think they are frequent; but they do occur occasionally.

11,869. Should you think their infection was due to their carelessness or ignorance more, or both combined?—Both. I think if they had been instructed they would have taken special care; but then, of course, when such cases occur fresh rules are generally made. It is the rule in the hospital now that nurses shall wear gloves in dressing all cases with discharges, and so on.

11,870. You said that pregnant women came to give in their names. Do you make any examination of them then so that you would discover if they were syphilitic?—Yes, they are all examined.

11,871. And if they were found to be syphilitic they would be treated at once?—They may not be found to be syphilitic—I mean there may be no external evidence.

11,872. You would not take a Wassermann?—Of every woman who comes?

11,873. Yes?—No; we have never done so.

11,874. I suppose you would consider it to be desirable that it should be done?—Yes; but the amount of work for the pathologists is considerable.

11,875. Dr. Newsholme seemed to imply in his questions that it was undesirable, or might be undesirable, that a nurse should know when she was nursing a syphilitic patient. Would you agree with that?—It is very difficult for her not to know if she is taking the proper precautions. I think she must be told what precautions to take; and if the doctor tells her just what precautions to take, she assumes it is a case of syphilis.

11,876. But do you not think the doctor ought to tell her straight out?—Yes. My point was, I think it is very much better for the nurse to know and at the same time have enjoined upon her the necessary reticence that she ought to exercise. She may not feel the same obligation to reticence if she has never been told. She may be free to tell what she thinks or imagines; whereas, if she is definitely told, I think she may be less likely to repeat things.

11,877. I do not quite understand why you make a point about instruction on these matters being given to young people by medical men or medical women?—It is because I think that any difficult subject is only taught in a simple way by people who know a great deal more about it than what they need to teach.

11,878. I quite agree with that as a general principle; but it seems to me when one thinks of the difficulty of organising teaching by competent medical people (because they must have not only the necessary knowledge, but they must have the gift of teaching and the understanding of young people's minds) the difficulty seems to be so great of getting it done to a sufficient extent, that I cannot see why a lay teacher should not get the necessary instruction to give it?—I laid emphasis on the fact that I think that at present. The reason why I specially think that for the present is, that at the present time I believe it would be very difficult for lay people to teach this subject to young people without some kind of false reticence. I do not think they would be able naturally to teach the subject with absolutely the same matter-of-factness that a medical person would, and I think it is very essential that it should be taught in that way.

11,879. I do not know whether you would agree, but my feeling is that the lay people might be taught by the medical people how to give the instruction. I should think then we would get the instruction more widely given?—I think that, too. It is very difficult to discuss this question of instruction at this stage of things. But my feeling is that to begin with medical people had better teach the young people. At the same time, I think the instruction of suitable lay people ought to go on coincidentally, so that they could both take on the teaching, and possibly later on they may be able to do it. But at the present moment I doubt whether it would not be wise to keep it in the hands of medical people.

11,880. (*Sir Almeric FitzRoy.*) From a reply you made just now to Dr. Mott, I gathered that in your opinion something is wanted in the instruction of midwives at the present moment?—I think it is.

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11,881. I wrote to Sir Francis Champneys, whom you doubtless know, on this subject, and I should like to read his reply as I want to get it on the notes, and should be glad to hear from you how far you agree with it. After some preliminaries, he says: "As regards instruction in venereal diseases, the Board deliberately avoided requiring the midwife to make a diagnosis of venereal disease." I suppose you would agree with that?—Quite; it is not like having a nurse there.

11,882. The opportunities for the training of midwives could not possibly cover such instruction as it would be necessary to give?—You mean the diagnosis?

11,883. Yes; the time given to midwives' training would not be extensive enough to cover instruction of that sort?—No.

11,884. "On the other hand, no primary sore in the mother, no prurulent discharge from the genitals of the mother or from the eyes of the child, nor any rash in the child can escape notification to the doctor or the supervising authority without breaking the rules which will render the midwife liable to penal proceedings. It must also be remembered that in a normal case the midwife's attendance is limited to ten days, and that any more prolonged attendance must be entered in her register with the explanation of the reason. It seemed to the Board that the above regulations would (if obeyed) secure medical help in all cases of primary venereal disease, and in gonorrhœal infection of both the mother and the child." Do you agree with that?—That is quite so. The rules for the midwife include the immediate notification of those conditions; but that does not alter my opinion that it would be very much better to give midwives a little more instruction than they are given. At the same time I entirely agree with Sir Francis that you do not want to instruct midwives to imagine that they are doctors, and that they can diagnose and treat these diseases. That, I think, is quite a different thing.

11,885. What character of instruction would you

give them to supplement what they already have?—I would give them the type of instruction you give to nurses; that is to say when they come across a case of venereal disease, for instance one of those cases which Sir Francis mentions, where a woman finds a prurulent discharge and notifies it, and the doctor comes into that case and attends it, the midwife becomes the nurse under the directions of the doctor there. I think nurses ought to be instructed so that they clearly understand what they are to do when they are carrying out instructions from the doctor. They will do it very much better if they have some idea of the disease and the dangers of infection of the disease, and exactly how they have to avoid them. I think for nurses and midwives alike they should be taught that; but I do not at all mean that midwives should be taught to diagnose these diseases; that is out of the question.

11,886. (*Mrs. Creighton.*) Ought not the midwife to know a little more than the nurse, because she may often be the only person in attendance, and she ought to be able to notice the disease?—I think it would be a very dangerous thing to let midwives think they are competent to treat. She ought not to be in attendance alone if she has a case of venereal disease to deal with.

11,887. But she ought to be able to diagnose the disease, so as to know when to send for the medical attendant.

(*Sir Almeric FitzRoy.*) Yes. But her instruction does cover points of that kind.

11,888. (*Mrs. Creighton.*) I was only asking whether the midwife's position was not different from that of the nurse. The nurse is never there unless there is a doctor; but the midwife may be in sole charge. Therefore the midwife must have more knowledge to diagnose than the nurse?—I do not think the midwife ought to be told that she is to diagnose a disease. I think she ought to be able to recognise symptoms.

(*Sir Almeric FitzRoy.*) Her instructions are intended to give her that power. Whether they do so or not, I cannot say. Thank you very much.

The witness withdrew.

THIRTY-FIRST DAY.

Friday, 3rd April 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

Sir KENELM E. DIGBY, G.C.B., K.C.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Mr. ARTHUR NEWSHOLME, C.B., M.D.
Canon J. W. HORSLEY.

The Rev. J. SCOTT LIDGETT, D.D.
Mr. JAMES ERNEST LANE, F.R.C.S.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Mr. F. R. Cross called and examined.

11,889. (*Chairman.*) You come before us as a representative of the Royal College of Surgeons?—Yes.

11,890. What post do you at present hold?—I am ophthalmic surgeon at the Eye Hospital at Bristol and consulting surgeon at the Royal Infirmary there.

11,891. How long have you been at the Eye Hospital?—I think since 1886.

11,892. Can you give us any statistics based on your experience in the hospital or in the infirmary of the number of cases of blindness which you would ascribe to venereal disease?—I could not give it to you statistically, I am afraid.

11,893. Can you give us any idea of the number of blind cases that can be so accounted for?—With

regard to ophthalmia neonatorum, we had 25 very serious cases in the ward last year; cases that had to be taken in. Then we had many more cases, more or less slight, that we dealt with quite early; some of them may have been gonococcal, some may not have been. They were not investigated from that point of view until they became more serious.

11,894. In your hospital how many beds do you have for your in-patient cases?—40.

11,895. And about how many out-patients do you see on the average?—We have about 8,500 individual new cases; about 30,000 visits.

11,896. Every year?—Yes.

11,897. Is there an asylum for blind people in Bristol?—Yes.

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[Continued.]

11,898. Have you any idea of the proportion of blind people who are syphilitic?—With regard to syphilitic, I could not say.

11,899. Or gonococcal?—Gonococcal, I got the doctor to look up the school. He went through the children at present in the school, and out of 102 children 41 are corneal defects largely due to ophthalmia neonatorum and 55 other diseases out of 102. In 1909 there were 98 children and 46 were classed as ophthalmia neonatorum, 52 other diseases.

11,900. That being entirely gonorrheal infection?—Yes.

11,901. Then among the remaining number of blind, there would be a large number who would be also blind from syphilis?—Yes, there would be.

11,902. So that out of the total number of blind, the number of cases of blindness caused by both of these diseases would be very large?—Certainly. Of course these are called ophthalmia neonatorum. They present the clinical appearances resulting from ophthalmia neonatorum, and to the best judgment of the doctor when they came in they were considered to be; so it may be overstating it a little to say absolutely ophthalmia neonatorum; but a corneal condition resembling ophthalmia neonatorum. You could not say they were ophthalmia neonatorum unless you had them under treatment when acute; but the results were assumed to be ophthalmia neonatorum. Of course it is a larger proportion than is generally stated to be the case.

11,903. Then you cannot give us any general statistics of the amount of blindness in the country in proportion to the population?—In 1891 the census showed in England and Wales out of a population of 229,000,525, 23,476 were returned as blind; that is one in 1,236. Of this 23,476, 4,995 were blind from childhood.

11,904. Is there any reason to suppose that that proportion is increasing?—It is said not to be; but in 1901, although it is stated there was a decrease after 1891, instead of there being 23,476 cases there were 25,317 cases. In ratio to the population, instead of it being one to 1,236, it was one to 1,285. I have done the best I can to get these statistics accurately, but that shows an increase, in actual numbers.

(Chairman.) It looks like an increase.

11,905. (Rev. J. Scott Lidgett.) But a decrease in ratio?—Yes, a slight decrease, one in 1,285. I was going to say there is a very curious thing: in the 1890 census in the United States—the figures I gave you were the 1891 census in England and Wales—out of a population of 62,622,250, the number of blind returned, both eyes of course, was 50,568; the ratio in the English return was one in 1,236, and the ratio in the American return was one in 1,238. It is rather a curious thing how similar the two returns were.

11,906. (Chairman.) Yes, very close. But I suppose those statistics can be trusted, the registry of the blind people?—Yes; I think as regards blindness they can be certainly.

11,907. Is there any possible means of arriving at the proportion of blindness which can be ascribed to either or both of these diseases?—We have statistics. For instance, in the 11th United States census there were 50,411 cases of double blindness. The causes were returned as unknown in 14,456. They were returned as known in 35,955, under such headings as congenital diseases, diseases of the eye, scrofula, blood diseases, brain diseases, and so on; injury caused blindness in 19 per cent.; the diseases of the eye, grouped together, caused blindness in 15.2 per cent.; and congenital diseases of the eye came to no less than 11 per cent. Whether those congenital cases were cases that became blind very early in life, or whether they were actually born, one could not say.

11,908. Those congenital cases would not be all syphilitic?—No, certainly not.

11,909. There are other congenital causes which give rise to blindness?—Yes.

11,910. It would not be fair to take the number of total blind and apply to them the proportion that you have just given us of this institution at Bristol?—Of

course the proportion in Bristol of ophthalmia neonatorum is very much larger.

11,911. It does seem so very large?—Then there are other returns. Out of cases by Magnus, blindness in both eyes, the optic nerve was held to be responsible in 23 per cent. of the cases. The uveal tract, that is the iris and choroid, the blood portion of the eye internally was 22 per cent. I should think a considerable number of those cases must have been syphilitic. You see, those two groups together are 45 per cent.

11,912. Have you brought any other figures that you think would be useful to us?—It is difficult to know really how much these figures are worth in a way.

11,913. It is?—Here is a return by Trousseau at the Hospice des Quinze-Vingts. I am going to group them in this way. There are 625 cases, and I am going to suggest that venereal disease accounted largely for atrophy of the optic nerve, 129 out of the 625; purulent ophthalmia, 101 out of 625; irido choroiditis 75, and choroidoretinitis 20. Of those four groups a considerable number I expect were venereal, amounting to 325 out of 625 cases. That is in the Archives d'Ophthalmologie 1892.

11,914. Nearly half. Then you would not say that the diseases which were described as being possibly syphilitic were all syphilitic?—No.

11,915. There would be a reduction on them?—Yes.

11,916. You would not like to give us any idea of the proportion, from your experience, that we might take?—No. I think it would be purely speculative; but I feel sure a considerable number of cases are syphilitic which are not returned as such. Of course with regard to these statistics of ours at Bristol those are children; the other groups, you see, are adults, and while the child group is enormously large on the side of ophthalmia neonatorum—injuries and optic atrophy, and many of these other diseases are absent; but I cannot help thinking that out of those figures I gave you just this moment, that 325, a considerable number of those cases were venereal. Supposing a third of them were, that makes 100 out of 625; but that is purely speculative.

11,917. At the hospital now do you have the blood serum tested in any case which seems to you to have a syphilitic taint?—Yes, we have a certain number of them tested; but, of course, we do not have as many tested as we ought to. The fact is the resources in Bristol are hardly equal to dealing with the whole of the problem of the Wassermann reaction in all the cases in which it ought to be applied, I think.

11,918. You think in every case where there is any doubt whatever the test ought to be applied before you arrive at a final diagnosis?—Of course there are certain cases where your clinical diagnosis is as certain as it can be, where for instance your clinical diagnosis would make you believe that a negative Wassermann test was inaccurate; but I cannot speak from authority on this subject. I am only speaking from what I see; but apparently if you do get a Wassermann reaction, you may rely on the spirochaetes having been at work in the individual.

11,919. Then at Bristol at present you say there is nothing like facilities enough for the tests which you would like to make if you could?—I think certainly not.

11,920. We will come back to that later on. Most of your observations have been clinical observations, I take it?—Yes.

11,921. Taking primary syphilis first, what is the effect of primary syphilis on the eyeball structure?—A good many cases of primary chancre have been reported.

11,922. In the eye?—In the eyelids, on the inner edge of the eye.

11,923. And may syphilis as ordinarily acquired by sexual methods appear as a chancre in the eye at an early stage?—Yes, chiefly on the eyelid. There are cases where a doctor has been treating a syphilitic case and where a primary chancre appeared on the eyelid.

11,924. Yes. We will come to that later. The chancre may appear at the early stages of syphilis in the eye?—Yes.

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[Continued.]

11,925. Is it associated with chancre in the other parts of the body?—No, it is simply the primary sore.

11,926. The primary sore alone. Is that the method in which primary syphilis shows itself most, as a chancre?—I do not know how one can say that primary syphilis were present in the eye unless you had some clinical manifestation of that kind.

11,927. You cannot test any of the fluids in the eye with a microscope or the Wassermann test?—Yes, by the microscope, and you would get it, I suppose, in the blood test. Prior to the chancre coming there, there might be evidence if it were carefully enough tested for.

11,928. (*Sir Malcolm Morris.*) The Wassermann would not show so early as that?—No, probably it would not. The only thing would be the microscopical examination. Then you probably could not use the microscope until you had got some sore or something; before that one would not look for it. But possibly, when the individual comes the chancre is obvious, and it may have been obvious 10 days or a fortnight before even.

11,929. (*Chairman.*) Is there any other form in which primary syphilis shows itself in the eye?—I do not know of any other.

11,930. Now, coming to acute secondary manifestations; what form do they take?—I think that any of the tissues of the eye might be affected in secondary syphilis. I have seen cases of iritis, which is probably more common than inflammation of the choroid.

11,931. How would you diagnose these secondary manifestations; are you now certain that they are syphilitic, and would clinical examination satisfy you?—No, they ought to be examined by the Wassermann test.

11,932. You would not feel certain?—One would not feel certain; but clinically one does feel reasonably certain, and one either uses salvarsan or mercury and gets good results.

11,933. (*Sir Malcolm Morris.*) Also the coincidence of symptoms in other parts?—Quite so. Of course it may be a part of an ordinary secondary syphilitic rash, or I think not infrequently it comes after that.

11,934. (*Chairman.*) With secondary manifestations generally, there would be some other evidence than in the eye?—Yes, as a rule.

11,935. Now later symptoms. How do they affect the eye?—They affect the same structures. If the eye was affected as a part of secondary syphilis, it would probably be rather more acute; but the symptoms are very much the same in later stages as they are in the earlier syphilitic stages, the earlier secondary stages.

11,936. Then in the subsequent stages you get a paralysis in the eyes as well as in other parts of the body?—Yes, you get typical symptoms of paralysis in the eye. You get paralysis of one or both pupils, altered shape of one or both pupils; impaired movement to light; sometimes impaired movement to accommodation; then you get double vision, or tendencies to double vision; headache due to double vision, and you get obvious paralysis of the muscles.

11,937. In all these cases I suppose you are dealing with acquired syphilis, are you not?—Yes.

11,938. Do the same kind of affections of the eye follow from the congenital form of syphilis?—No. The symptoms of congenital syphilis are a fairly typical picture, the ordinary average case. The usual case affects the cornea; what we term interstitial keratitis, and the picture of the disease is in a very large number of cases absolutely typical. You can tell by the look of the patient what the case is.

11,939. Do you consider that the eye as a test is infallible in congenital syphilis?—Interstitial keratitis is, I think, practically always due to congenital syphilis; and I think Mr. Browning, in applying the Wassermann test, having applied, as I dare say you know, the most careful negative enquiries in other directions, found all his interstitial keratitis cases were positive.

11,940. Do you see yourself a large number of cases of children with congenital syphilis?—Yes, a considerable number.

11,941. A very large number?—Yes, a very considerable number. Then the disease also gets deeper; it affects the iris, and all the internal tissues of the eye, particularly the iris, the choroid, the retina; but the cornea is the main thing; that is the typical thing.

11,942. In cases of children who are infected with congenital syphilis, is anything done to get into touch with the parents; to tell the parents what they are suffering from and be treated for it?—I cannot say we have done so at present. You see these cases may come on rather late in life. I have known an instance of interstitial keratitis come on perhaps at 25. Generally it does not come on, speaking without the book, before the age of 6 or 8. It is not a disease in the very early ages of childhood, as a rule.

11,943. Keratitis?—The typical interstitial keratitis—the typical congenital manifestation. I do not think you get typical manifestations of syphilis in the eye in children as a rule when they are quite young. They do get it of course quite young too.

11,944. Many cases occur in which interstitial keratitis shows itself as a result of congenital syphilis, where no other symptoms of congenital syphilis had shown themselves in the person?—Yes, I think it might be so.

11,945. Possibly that person at an earlier stage before the keratitis developed would give a positive reaction?—Yes, possibly; it would not be certain.

11,946. Then you allude to the methods of dealing with congenital syphilis—prevention by spreading knowledge of the disease first. Have you formed any clear view as to how knowledge should be spread?—I think this thing permeates the whole community, and I think it ought to be faced. I think the knowledge ought to be spread tactfully. I think the parents ought to be encouraged to talk to their children about it where they are able to do so. I think the medical profession ought to instruct the public. I think it ought to be pointed out that any of these forms of disease are not local things which are going to pass off; but that the individual may be stamped for life with it, and it may go down to his or her posterity; it may pass from one to the other in married life. I think it has to be extremely tactfully done, but I think it ought to be done. I do not think it is any good covering the thing up. I do not think it is a bit understood, my lord; I do not think people a bit realise it, except only a very limited number of people; and it is only by looking into those figures that we doctors realise it fully. Even in a large practice we see a large number of cases, but they get diluted; but when you are going into the matter as you are here, I think you must realise what a terrible scourge to humanity the thing is.

11,947. I think we thoroughly realise that; but our difficulty is to discover the best means of spreading this information as to these diseases in the least harmful way?—I quite realise your position; I think it ought to be very tactfully done.

11,948. You think it ought to be really the function of the doctor to do it?—Yes, partially, I think he ought to take his share of the responsibility.

11,949. And at all events wherever he comes across a case, or suspects a case of a parent being infected, and likely to produce infected children, he ought at once to point out the danger?—I think so.

11,950. To a husband, or to a wife?—You must take the case as it comes. I think it ought to be part of his duty probably to the husband; but the husband might or might not tell the wife.

11,951. Then you allude to the importance of early diagnosis and energetic and satisfactory treatment, and I think we are all agreed on that, and all the evidence has pointed to that as being essential. Then I come to assistance from the State. What do you think would be the form assistance from the State should take?—First of all I do not think that the Insurance Act touches this thing at all. The insurance doctor is, I believe, expected to treat the patient for venereal diseases, as for other diseases.

11,952. Yes, he is?—He cannot be expected to make a scientific investigation. It is not everybody who can do a Wassermann reaction properly. These

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[Continued.]

examinations, I think, ought to remain in the hands of experts. Then also I am taking the extreme case of the Insurance Act doctor—he is quite unable to afford, and the chemist cannot possibly afford, the expense of injections of salvarsan. Two or three injections cost perhaps 1*l.*, or something of that kind. I think the State ought to provide centres where the diagnosis can be made for the public and for the doctors. I think there ought to be a charge. I do not say that the State ought to do it all. I think first of all use ought to be made of the voluntary hospitals and the universities, and so on where they have provided for these tests to be made; but probably more and more work will be thrown upon them in the clinics of the hospital, and so forth, and they will want help, and that help ought to be given by the State. I do not think the voluntary hospitals ought to be asked to find this particular form of inquiry which I think is absolutely essential, and which is very expensive. I think in that way certainly the State ought to help.

11,953. You think the facilities offered by the voluntary hospitals should be increased so as to deal with work which lies outside their proper sphere, and for that purpose hospitals should be subsidised—that is, the laboratories should be subsidised?—Quite. Where there are scientific laboratories in London, and big centres like Birmingham and Bristol, that is the best place to begin with it. Then possibly in counties it may be advisable to have centres.

11,954. Municipally managed?—I do not know about that. I think perhaps it would be rather outside the venue, yet I do not know how else it is to be done. County councils I think.

11,955. County council laboratories?—And possibly municipal laboratories in large municipal centres; that is to say, help given by the municipality to existing laboratories, unless it is done by the State. I do not know what the best way of doing it would be. I think an effort ought to be made to try and do it.

11,956. But you would begin by developing existing laboratories?—Quite.

11,957. Then do you see how the existing machinery of the Insurance Act can be made to work in the direction we want?—I do not quite see how it can be done at the price.

11,958. Supposing that the panel doctor could send his patient to have his serum taken, or find time to take the serum himself, and could get free for the patient and free for the panel doctor the necessary test made, would that work?—Yes; I think he ought to be given the extra help outside the insurance responsibility.

11,959. Then would you establish special hospital clinics for dealing with these diseases alone?—No, I do not think I should. I believe at Sheffield they have got a night clinic for dealing with these cases, and I think perhaps that is the best way to deal with it. Of course in a big place like London it is almost better, I dare say, to have the special hospitals, or make use of them; but in smaller places it would be creating a new charitable supply of institutions, and would direct attention to the thing. I think these people ought to be treated among the ordinary patients as far as possible; but I think arrangements ought to be made perhaps in the evening to get an expert on these diseases, and perhaps a physician and surgeon and pathologist, to arrange to go one day or one or two days a week, and make use of the voluntary hospitals in that way. At any rate, I think something ought to be done to make it easy for these people to go to get thorough treatment.

11,960. You would not label these clinics by any name which particularly denoted these diseases?—No, I think it would be better not to. After all, you see, we are dealing with a lot of these diseases now to some extent almost without knowing it.

11,961. Now, coming to gonococcal infection. Gonorrhœal ophthalmia is the first disease you mention. Do you come across much of that?—Yes, one sees a good deal of that. It is a common thing. Conjunctivitis in children is a common thing. A great many of the cases of conjunctivitis are due to

gonococcal infection; and a great many do not come until it is too late to do much.

11,962. What do you call gonorrhœal ophthalmia; is that due to acquired gonorrhœa or to congenital?—I mean by gonorrhœal ophthalmia, a gonorrhœa that the adult has acquired, either from himself, or perhaps through the misfortune of using a towel somebody else has used, or in other ways.

11,963. Do many cases of that sort, of what is called innocent infection, come before your notice?—I do not think gonorrhœal ophthalmia is a very common disease. It is a very curious thing how much easier it appears to be to affect the child's conjunctiva than the adult's. At any rate, while ophthalmia neonatorum is very common, gonorrhœal ophthalmia is not so very common.

11,964. Have you heard of many epidemics of gonorrhœal ophthalmia being introduced in institutions by infected towels?—You mean amongst children?

11,965. Yes?—Yes. I believe in the Foundling Hospital in Vienna, a good many years ago, I think no less than 15 nurses lost an eye from gonorrhœal ophthalmia during one year. Children and young girls seem to be particularly easily affected by the gonococcus.

11,966. Then gonorrhœal ophthalmia can present itself after infection by gonorrhœa in the adult and may be transferred from the adult by what is really contagion?—Yes.

11,967. Now these other diseases—rheumatism, iritis and uveitis—are these results of acquired gonorrhœa, or do they appear congenitally?—No. I think that the gonococcus is very prone to remain latent and undetected in the urethra, and in some way it gets into the blood serum; I suppose like a blood poisoning condition. Very often arthritis is produced, inflammation of the joint, and then as part of that, or as a sequel to that, iritis occurs. I should like to say here, I have an idea that what is called rheumatic iritis is not very common. We talk about it as if it very frequently occurred in a rheumatic patient; but I think Mr. Beaumont, at Bath, who is associated with a very large rheumatic hospital there—I forget for the moment what his figures were, but he only saw a very limited number of cases of iritis in association with those pure rheumatic cases; and, clinically, I always suspect a peculiar type of iritis that we call recurrent iritis to have a gonococcal origin. I think nowadays, in many inflamed eyes, with the present knowledge that we have, that very careful examination of the urethra and so on ought to be made, so as to see whether it is likely to be gonococcal or not.

11,968. Is the gonococcus actually detected microscopically in the eye or in a discharge from the eye?—From the surface, yes; from the interior of the eye, I do not know that that has ever been done; but I think some experiments that have been made in injecting some of the intra-ocular fluids in certain cases have given rise to the opinion that it is gonococcal.

11,969. As far as the structure of the eye is concerned, it is a place in which the gonococcus could breed and multiply?—It is admirably adapted for any organism to flourish in; I think it is a kind of incubation chamber.

11,970. Have you any information to give us as to the effect of quackery on eye diseases?—I do not want to be hard on the quack but he never makes a diagnosis, and therefore his treatment cannot be accurate. It must be harmful. No doubt there are certain cases where early recognition and early diagnosis and early treatment are of the greatest importance. I have nothing to say in favour of the quack, and I think he ought not to be allowed to deal with the credulous public. I think he is a danger. Nature cures a large number of cases.

11,971. In your experience have you come across cases which have been harmfully treated by quacks?—Yes, I have seen cases: I do not know particularly venereal cases.

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[Continued.]

11,972. Cases which, if they had been properly diagnosed earlier in life might have been cured?—Yes.

11,973. (*Sir Kenelm Digby*.) In the hospital with which you are connected at Bristol, is there any special provision for venereal cases?—We have made arrangements with the university people and with the big infirmary opposite to have a certain number of our cases tested and examined; but, unfortunately, we have not a department of our own.

11,974. Are venereal cases taken into the hospital?—Yes; we do not differentiate them in any way.

11,975. In separate wards?—No.

11,976. With the others?—Of course, in ophthalmia neonatorum or of the adult we are careful, but even with them we have no separate wards. Perhaps that would be an advantage; but there is no difference made in that way with syphilitic patients.

11,977. With regard to the mode of treatment of venereal diseases, I was not quite sure whether you said you were in favour of having it separate and distinct at all from other diseases. Do you think there are such peculiar conditions attaching to venereal disease, the expense of treatment, general treatment and the tremendous evil consequences of them, that they require special concern?—I think really to investigate all these cases, even in an eye clinic, which is of course a small affair compared to a general hospital, it would be a great expense.

11,978. And an expense which was absolutely prohibitive?—Of course, the voluntary hospital is in a constant state of bankruptcy and I do not think it would be fair to throw upon the voluntary hospital or upon the medical staff, who are already very hard worked, the extra expense or the extra labour which I think could be done much better by centralisation.

11,979. Then does it not come to this; that if really these diseases are to be adequately dealt with at all you must have a very extensive amount of assistance from public funds?—Yes, I do think so.

11,980. Both hospitals and other institutions?—Yes.

11,981. If hospitals are to deal with them adequately, there must be something in the nature of a public grant?—Yes; it seems to me the only way to meet it.

11,982. And if there was a public grant, of course, that would to some extent introduce State control?—Yes.

11,983. I mean there would be with regard to how the money was used?—Yes.

11,984. You spoke of having institutions primarily in London and if possible in other parts of the country. I suppose, to deal with the disease at all adequately, you must really aim at bringing some institutional treatment within the reach of nearly every one who is suffering from that disease?—Yes.

11,985. Take your panel doctor, who is so very busy that he cannot undertake the whole treatment himself. I mean, he could not do it?—No, I think not.

11,986. Therefore, there must be for those patients who resort to a panel doctor, to be adequately treated, some sort of institution to which they can be sent?—Of course, as a matter of fact, all the serious cases come on to the hospital now. I was only putting that as a point of argument. They come on to the hospitals really and the hospitals raise no difficulty; but, of course, we now begin to realise that all this advanced knowledge and all this advanced accuracy with regard to diagnosis and treatment ought to be carried out. In answer to your question, I think that outside help ought to be found.

11,987. Then does it not really come to this; that hospitals, as they are at present organised, could not treat them adequately. Must not you have some special institution, do you think, where you could have these diseases treated?—I expect an enormous number of patients at present in the general hospitals are really syphilitic and it would be merely a further investigation in the hospital. All the serious cases are dealt with in the hospitals, you see, at the present time.

11,988. But if you come down to the working classes, and all stages of society, could the hospitals adequately deal with those cases?—The hospitals take in now and deal with the really serious cases, only in some cases they hardly realise they are syphilitic. In an enormous number of syphilitics, especially if this advance of knowledge is true, and it seems to be undoubtedly true, and is made use of, the thing will be arrested in the earlier cases. This ought to relieve the hospitals of a considerable number of serious cases instead of having the number increased.

11,989. That makes the increase of facilities for treatment more and more important; because if you are to treat it effectually you must treat it at once?—Yes; but you do not require in-patient treatment for more than a day or two.

11,990. That is a consideration on the other hand; but in some form or other, in the form of hospitals or other institutions, you want places within the reach of people all over the country, where they can be sent and get the requisite treatment at the earliest stage possible?—Quite.

11,991. And get as much continuous treatment as is required?—Quite.

11,992. That looks like a very big undertaking. If that is to be provided, it requires a vast amount of organisation?—Yes, it is a difficult question.

11,993. Do you know of any scheme which has been put forward at all for treating venereal diseases on that scale, trying to get it established throughout the country?—I think the serious cases are under treatment in the hospitals. The cases that have serious symptoms are in the hospitals now being dealt with and I think if you could find the scientific accurate diagnosis necessary and the new methods of treatment, many of those cases would never reach the stage they are in now. I believe the hospital could deal with the cases clinically. I believe they are quite capable of dealing with the cases if they could get the proper scientific help in being assisted in their diagnosis and being able to afford the expensive treatment, which frequently will stop the disease in a very early stage.

11,994. But as hospitals are at present supported, that would hardly be possible financially?—It would be a great strain on the voluntary hospitals, I think, to find the money for it. No doubt they are doing it to a great extent; but I think it is a fair case for getting State help.

11,995. And State help on a large scale?—A certain amount of money would do it. If the State could find the money it could be done quite well. I think it might be left to the hospitals to organise it.

11,996. It might be a good investment, you think?—I am certain it would be a very good investment for the State; because they would not only have sounder citizens but healthier children growing up.

11,997. And it might relieve the lunatic asylums?—I have no doubt that an enormous amount of brain disease is really due to syphilis; and even where people are predisposed, if they were free of syphilis, they would get on, but syphilis just upsets the balance.

11,998. (*Sir Malcolm Morris*.) Is there very much venereal disease in Bristol and the neighbourhood?—I should not think there was.

11,999. Is there any difference, do you think, since you went to practice there?—What struck me most when I first went there—I went there as general surgeon in the first place—

12,000. What year was that?—Somewhere about 1880 or 1881. There was an enormous amount of tertiary syphilis. I had to deal with practically all the out-patients.

12,001. At the Royal Infirmary?—At the Royal Infirmary. There was an enormous amount of necrosis of the facial bones, the palate, the cranium bones, the tibia, and so on; and I had been taught by Mr. Henry Smith, whom I dare say you remember, to give heroic doses of iodide of potassium, and it was marvelous the change in my first year in the out-patients.

12,002. What class of community was it specially in—sailors?—Yes, sailors; but also among a good

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many working classes, and a great many women were affected too.

12,003. Has there been a change from that time to the present?—Yes; there is nothing of the sort now.

12,004. Have you any suggestion as to what the change is due to?—I think syphilis has been much better treated with mercury, diagnosed earlier, and much better dealt with, and probably the position of the people is rather better.

12,005. Do you think the people you saw when you went first to Bristol had not properly been treated by mercury?—No; I do not think it was understood in the same way.

12,006. There was a lot of mercury given, was not there?—Yes; but these particular cases had reached a tertiary stage.

12,007. And that rather looked as if they had not been treated in earlier times?—Yes, had not been thoroughly treated.

12,008. Have you heard from surgeons at the Royal Infirmary whether they have such a large number of cases at the present time?—I feel pretty sure they have not.

12,009. There is not so much late syphilis?—I am certain there is not.

12,010. What about the percentage of primary; is there as much in Bristol as there was?—I could not answer that question.

12,011. Have you any knowledge as to gonorrhœa?—No, not to answer it accurately.

12,012. In private practice, as well as hospital practice, is there a difference in the people that come from the town as compared with the people that come from the country districts in the West?—Yes; I should say that venereal disease in the country is comparatively rare, as far as I could form an opinion among the lower classes of course.

12,013. Do you see patients that come from the West of England?—Yes; we get them from all round.

12,014. From far down?—Yes, we get them, and half way to London.

12,015. Is there much venereal disease?—I should not think there was so much, from what I see. I do not see them in the primary stages. I should say there was a good deal of syphilitic infection among one's clinic.

12,516. As far as the diseases of the eye are concerned, do you see any difference in the proportion between the country and the town?—I do not know that I could answer the question fairly.

12,017. Which of these two diseases, gonorrhœa and syphilis, produces that greatest amount of blindness?—You can state when the gonorrhœa causes it. It is more easy to state definitely that the gonorrhœa has caused it; but I have no doubt myself that syphilis is responsible for an enormous amount of blindness and diseases of the eye.

12,018. But you would not like to say there was more from gonorrhœa than from syphilis?—I expect there is. You see one makes one's clinical diagnosis, and in many cases one says this suggests syphilis and you get no history, but you cure them with mercury.

12,019. In ophthalmia neonatorum where do the children chiefly come from—what class? Is it associated with extreme poverty, as a rule?—Yes, considerable poverty.

12,020. With overcrowding?—No doubt to some extent and want of hygienic precautions, and so forth.

12,021. Do any of the cases you have seen in your own hospital come from other institutions?—Do you mean in other towns?

12,022. No, other institutions; that is to say, lying in hospitals, and other institutions of that kind?—At Bristol, as it happens, all the Children Hospital people come on to us, and from other charities; they send them on to us when they get bad eyes.

12,023. But, do they come from other institutions?—The other big hospitals have their own clinics.

12,024. Have you known of an epidemic of ophthalmia neonatorum in any institution where children are?—Personally, I have not.

12,025. And you would be certain to have heard of it if there had been?—Yes.

12,026. Have you yourself used salvarsan in syphilitic affections of the eye, personally?—Yes.

12,027. Have you ever seen any damage done by it?—No; I have not used it very very often; but I have never seen any damage from it.

12,028. Take, for example, syphilitic iritis; does it clear up as rapidly as it used to do under mercury?—Yes; I think much more.

12,029. Much more rapidly?—Yes.

12,030. Therefore you think salvarsan is a distinct advance in therapeutics?—Yes.

12,031. You know there has been talk of much damage done to the eyes by the use of arsenic?—Yes.

12,032. A well-known doctor, now dead, said arsenic was calculated to do great damage. Have you ever heard of or seen any cases of damage to the eyes by the use of salvarsan?—It seems that some of the other arsenical preparations are more damaging. There is good reason for believing they are, and there has been damage.

12,033. They are practically given up are they not?—Yes, they are given up.

12,034. But not salvarsan itself?—I should say that the damage is so unlikely to occur that it may be left out of calculation. At the same time I think the individual ought to be carefully examined before he is treated with salvarsan.

12,035. Have you ever known of any cases in which nerve damage has been caused?—No, not personally.

12,036. Which preparation of salvarsan is used now for eye cases?—Both are used, the neo-salvarsan and the salvarsan.

12,037. But is there any difference so far as the effect on the eye is concerned?—I should think perhaps salvarsan is the better remedy of the two.

12,038. That is the experience?—I think so.

12,039. (Mr. Lane.) Can you explain why there is this high proportion of cases of blindness due to gonorrhœa in the institution you mentioned?—No. We have a very careful medical officer there. I have never gone over the cases myself. I think probably if one went into it carefully, one would find these are all corneal troubles, and some of them might not be absolutely gonococcal. It might be bad inflammation in a healthy child—strumous occasionally. They might be misled, and I think probably it is a little over-stated.

12,040. But the ordinary proportion is said to be about 30 per cent. is it not?—Yes.

12,041. Due to gonorrhœa?—Yes.

12,042. Do you get any cases of blindness due to syphilis?—Do you mean in congenital cases?

12,043. Yes?—Yes, you get these interstitial keratitis cases. They practically blind them; they blind them as citizens. They are blind to the doctor, but, perhaps, they are not to the Registrar-General.

12,044. But they are cases kept and treated in these institutions?—Yes.

12,045. Of course there are very many other cases of blindness occurring in the later stages of syphilis?—Yes.

12,046. And they would also enter into these institutions?—Of course, the adults would not go into the school. We get rid of them at 16.

12,047. You say you have never seen any deaths or any ill-consequences of salvarsan?—I have not had enough experience for my information to be of much value; but I have not seen any effects from it.

12,048. I believe a good many cases have been published in France?—I know there have been cases. I think precautions ought to be taken in giving salvarsan, and, if the intra-venous way of giving it is the right one, as it undoubtedly is, I do not think it is every man's job to do it. I do not think salvarsan ought to be injected by the ordinary medical man. I think you will get into mischief if that were done. I do not think it is the same thing as subcutaneous injections, and I think care should be taken in prescribing it. The individual should be examined and it should be done under ideal conditions. Then I think it is practically devoid of risk, and there appears to be no doubt whatever of the extraordinary efficacy of it in the destruction of the spirochæte.

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12,049. You have heard of cases of blindness following the use of other arsenical preparations, such as orsudan or soamin?—Yes, I have. Ernest Clark published some cases.

12,050. And I did?—Yes, you did.

12,051. I think you may say that that treatment has been abandoned?—Yes.

12,052. With regard to these cases of tertiary syphilis which were so rife in Bristol when you went there, have you any cause to assign for it?—I think it was simply that iodide of potassium was not given in big enough doses.

12,053. There was a theory in vogue at that time, and since that time, that two years' treatment was sufficient. That would not be your opinion now?—I think every case should be watched.

12,054. Every case should be treated on its merits now, and on the result of salvarsan?—Yes.

12,055. With regard to these cases of ophthalmia neonatorum, that is quite a preventible disease, is it not?—Yes.

12,056. Do they take steps at Bristol to prevent it?—On April 1st of this year the disease was made notifiable; and, just as it was formerly done in Germany, where midwives for some years were obliged to report at once on the first symptom of any derangement of the eyes, and represent to the parents and others that medical assistance was urgently needed, and the same thing in the United States, it is so now in England.

12,057. Would you urge the instillation of nitrate of silver into the eyes of every new-born child as a prophylactic measure?—I do not think it is a bad practice. I do not think there is any objection to it.

12,058. It is quite a preventible disease in the same way as gonorrhœal ophthalmia?—Certainly.

12,059. I suppose you do not see many cases of gonorrhœa; but do you know if instructions are given to the patients at Bristol as to the possibilities of complications of this sort?—I should think so.

12,060. Printed instructions?—I do not know that they are printed. I think that might be worth doing; but I do not see so many cases of gonorrhœal ophthalmia now. I see them; and they are most disastrous, unless you get them early.

12,061. Do you see many cases of gonorrhœal ophthalmia in young children, or in children from three to four years of age, often accompanied by discharge from the vagina?—Yes, I see a certain number of cases, so that if a child of that sort of age comes to me, I always have the vagina examined, and frequently find it is in an unhealthy condition.

12,062. Do you find various lesions of the eye that are sometimes described as rheumatism are closely associated with gonorrhœal arthritis?—I think so. I feel that very strongly.

12,063. And that probably the focus of the dissemination of the gonococcus is in the prostate or beyond?—Yes.

12,064. That the discharge is not plainly visible?—Yes.

12,065. (*Sir Malcolm Morris.*) May I interpolate one question. You said you did not believe in rheumatism causing rheumatoid iritis so much?—No.

12,066. Does that equally apply to gout?—No, I do not say that with regard to gout. Gout is such an inclusive term. Still, I think the term "Rheumatic Iritis" is an incorrect one. I think many cases called rheumatic iritis are really gonorrhœal.

12,067. (*Mr. Lane.*) In your opinion the Insurance Act has not been of particular benefit to the public as regards these diseases?—I would not say that; but what I say is that you cannot expect the panel doctor to carry out the treatment of syphilis on the present knowledge of the subject, unless he gets further help.

12,068. He is not at all likely to be competent to administer salvarsan?—No.

12,069. (*Mrs. Creighton.*) Have you any baby clinics in Bristol?—No, I think not.

12,070. Or schools for mothers?—Yes.

12,071. Do you imagine that the dangers to children's eyes are taught in these schools to mothers?—I could not answer that.

12,072. You do not know how far that is so?—No.

12,073. You would think it is desirable that it should be part of the instruction?—Yes.

12,074. Have you school clinics?—Yes.

12,075. Where there is treatment given to children's eyes?—Yes. The arrangement is that the Bristol education people send them to the eye hospital and the eye dispensary.

12,076. You mean that a child from the school clinic would be sent on?—Yes, would be sent on to us as a matter of course.

12,077. You said you did not think Bristol was particularly bad in venereal disease?—No, I do not think it is.

12,078. Would it not be just the sort of town one would expect to find bad—a port, and very poor in parts?—It is not a very large port. Ships come in and go out again. I should not think the sailor population is very large.

12,079. Have you any reason to give why it should not be bad?—No; and I may be inaccurate in my assumption.

12,080. It is only an assumption?—It is only an assumption. I do not see so many cases; and used not to see so many cases perhaps one might say.

12,081. Then I think if I understood you aright that as regards treatment in the future, you do not think it is so much larger hospital accommodation that is needed, as better means of diagnosis and dispensary treatment?—Quite.

12,082. You think that probably if that were adequate, the existing hospital accommodation as regards beds would be sufficient?—Yes, I think so.

12,083. Would it not be possible to associate a panel doctor with such dispensary treatment by giving the patient a printed card of instructions as to what was to be done, and leaving it to the panel doctor to continue the treatment?—Yes.

12,084. Ought not the panel doctor to be instructed to follow out the treatment and watch the patient?—Quite. I hope you do not think I said anything derogatory at all. What I said was that his position would be extremely difficult if he is to do his duty to syphilitic patients under present conditions, because now if a panel doctor gets a bad case it comes to hospital.

12,085. I was only thinking that with regard to the prolonged treatment which is necessary, and the watching of the patient, the dispensary or institution, or whatever it is, should be relieved of a great part of the work by a panel doctor?—Yes.

12,086. Do you know anything of the way in which the whole matter is treated now in Denmark and Norway?—No.

12,087. (*Mrs. Scharlieb.*) Will you tell us whether you think that children who are born blind might in many instances be suffering from spirochæte infection and might be saved if the mothers were treated during pregnancy?—Yes, I do think so. Of course children are born blind without any kind of syphilitic poison; but there is, no doubt, intra-uterine poisoning, and I think, if I may add to your question, where there is any reason for supposing a syphilitic child may be born, the mother ought to be treated.

12,088. Then if a woman has a series of miscarriages and one or two premature births, dead children and so on, would you not warn the parent?—She ought to be examined, I think, and the Wassermann test repeated, and treated and warned.

12,089. That would be a reason, would it not, for endeavouring to get poor women to notify their pregnancy, so that they might be cared for. I mean, a woman who is supposed to be syphilitic should notify?—Yes.

12,090. And be treated during pregnancy?—Yes.

12,091. In that way a good many eyes would be saved?—Yes, quite.

12,092. With regard to ophthalmia neonatorum, the present action ought to help us a great deal?—Yes. At the Liepsig Lying-in Hospital proper treatment for ophthalmia was introduced in 1880; for the six years preceding there were 10½ per cent. cases of ophthalmia neonatorum; in the following six months

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the percentage fell to .5, and since 600 infants were born without a single case. Horner of Zurich did not lose a single eye in 108 cases of blennorrhœa. I think cases came to him—I forget exactly how it was done—but they were brought to him at once. But some of the statistics of the lying-in hospitals are terrible. In the Vienna Foundling Hospital several years ago, out of 1,347 cases of ophthalmia neonatorum there were 21 per cent. in which one eye was lost.

12,093. That was awful?—Of course, that is very extreme. Such results could not occur now.

12,094. There is a great lying-in hospital at Vienna?—Yes.

12,095. When I was there in 1883 they used to wash the eyes of every baby directly the head was clear, with three grains to the ounce of nitrate of silver, and, so far as I saw, they had no ophthalmia. This was either another hospital or they have given up the practice?—I think that is done a great deal. Of course, a great point is that when a child is born you should separately wash the face and clean out the eyes thoroughly. I do not know that there is any objection to using nitrate of silver; but I do not know that it ought to be recommended as a routine treatment. I do not consider it necessary. In a questionable case it might be done, and I do not think any harm would be done in making it a routine practice.

12,096. If you knew the mother had gonorrhœa, you would do it?—Certainly I would do it then.

12,097. That is from the point of view of gonorrhœa?—Yes.

12,098. And would you not agree that gonorrhœa is an extremely serious disease, especially with regard to women?—Yes, it is most frightful.

12,099. It leads to a very large percentage of the inflammatory pelvic diseases?—Yes. I am very glad you asked me that question; because if gonorrhœa in the male can remain for years or for a very long time in anatomical regions where there is not much encouragement for it to lie up, look what it must be in the female genital organs. I have no doubt that gonorrhœa in the female is responsible for most disastrous results.

12,100. In the first instance sterility; and secondly inflammatory diseases which lead to operations of a very serious nature?—Quite.

12,101. (*Canon Horsley.*) You could not quite tell Sir Malcolm Morris whether gonorrhœa or syphilis produces the greater amount of sickness; but suppose you divide it into ages; which produces most blindness among children would you say?—Gonorrhœa.

12,102. And which amongst adults?—I think syphilis would.

12,103. You would distinguish them in that way?—I think I could go as far as that.

12,104. Do you have cases of consecutive children of the same family suffering from ophthalmia neonatorum?—I could not answer that question as a fact.

12,105. If the woman is infected, and is not usually cured, would you expect all her babies to be born with it?—If she has gonococcal mischief, the children would be very highly predisposed to gonorrhœal ophthalmia.

12,106. And you would expect to find several cases of blindness from that cause in the same family?—Such cases do not occur. Nature would probably rescue a great many of them.

12,107. You mean they would not live?—No; I do not mean that. No doubt a great many children are born through very unhealthy vaginal passages without getting ophthalmia. But I think there may be grounds for your suggesting that. I could not answer it positively, but it must be very rare.

12,108. I have spent the greatest part of my life amongst the poorest people in London, and one constantly hears that a woman has a blind baby, but one does not hear that a woman has all blind babies. I cannot remember many instances of two in the same family?—I feel the same as you do about it.

12,109. But, *primâ facie*, if a woman has had one, she goes on and has other children who are syphilitic?—Yes.

12,110. But apparently not so many suffer from ophthalmia neonatorum?—Some children are born under more favourable conditions, and the conditions of the passage may be different.

12,111. With regard to the treatment by panel doctors of these diseases, does not the great difficulty come in about certificates there? A man is in a friendly society, and the friendly society will not pay for diseases brought on by immorality. What does the doctor do in that case?—I think the State ought to make it possible for that man to get treatment; and I think that the doctor, without making any fuss about it, should send him to be examined.

12,112. The present difficulty is that we cannot rely on statistics largely because, owing to the requirements of friendly societies, the certificates are not accurate?—Yes.

12,113. In the same way that would affect the children?—There are, no doubt, great difficulties about notification.

12,114. With regard to the prevalence amongst children, you are probably aware of the tremendous outbreaks one has had in district schools, and so forth—hundreds at a time?—Yes.

12,115. That is largely from infection of one child to another?—Yes.

12,116. And probably one brought in from some outside home?—I do not think those are gonorrhœal cases; they are due to other organisms.

12,117. You do not think it would come in from the constant influx of children from poor dirty homes?—It does seem in fact as if girl children in wards, a lot of girls together, almost without contact get the disease; but in the case of school children it would go from eye to eye with contact infection.

12,118. You have a large institution of that sort called Mullers?—Yes.

12,119. Is there much ophthalmia there?—I do not think so.

12,120. (*Rev. Scott Lidgett.*) Would you impose any additional responsibility on panel doctors in regard to these diseases?—The panel doctor is responsible for his patient, and if his patient gets syphilis he ought to be properly treated.

12,121. That is to say, you do not contemplate any responsibility being put upon him that he does not bear at the present time?—I think he would be perfectly willing to accept the responsibility when he realised the thing more thoroughly. But what I say is, I do not think he is able at present to satisfactorily deal with the cases.

12,122. What you would do, I take it, is to put him in such relation to the new provisions that may be made effectively dealing with this, so that he would always be able to send on his patients to take advantage of them?—Yes, quite.

12,123. And you would rely rather on inducements upon those patients to go than upon any absolute compulsion?—Yes, certainly.

12,124. I presume you would hardly think public opinion ripe at the present moment for such compulsion?—No, I do not think it is. I think something ought to be done, but I think it ought to be done very carefully.

12,125. If compulsion were resorted to in making people go from the panel doctor to have this treatment, it might keep them from having recourse to their doctor in the initial stages of these diseases?—Yes; there might be difficulty.

12,126. And so play into the hands of the quacks?—Yes.

12,127. Mrs. Creighton spoke to you just now about schools for mothers. Do you think that such schools, properly organised, can play an effective part in helping to deal with this?—Most certainly.

12,128. That would depend, of course, upon their being carefully organised, so that carefully instructed teachers could always be on their staff?—Yes; it ought to be done very thoughtfully and very carefully; but I think it ought to be done. When they wrote to me in Bristol about the notification of ophthalmia neonatorum. I wrote back and said I should be very happy next month to give a lecture to midwives or

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anybody the town council thought should come, clergy, ministers, or people who were working in that sort of way; and I expect I shall give such a lecture or two lectures.

12,129. Then you would instruct the nurses or others who have to do with these schools, so that they might be on the look-out for these symptoms and send the children on at once to the proper institution?—Yes; and I hope at that lecture there will be a certain number of such people who will distribute the knowledge. I hope it will be the means of having the thing talked about.

12,130. Have you thought at all as to whether the education authorities ought to play an increased part in warning young people about these dangers, and in educating young people about the dangers of these diseases?—I should not like to pledge myself in a line of policy.

12,131. You have not thought particularly about it?—No, I do not think I could give an opinion that would be of any service.

12,132. (*Sir John Collie.*) You are aware that some of the newspapers read largely by the working classes, have lately been sounding a note of alarm against the treatment by salvarsan?—I did not know it.

12,133. It is so. I want to ask you from your very large experience as an ophthalmic surgeon, if you have personally seen any of the alleged blindness produced by that treatment?—No, I have not seen any arsenical blindness myself—not by injection.

12,134. With regard to the State provision for diagnosis, I take it the State provision for diagnosis would be very valuable in many of the doubtful cases, especially where a large amount of work was being done amongst the poor?—Yes.

12,135. One of our panel doctors in London recently told us at a public meeting that he saw 137 cases in the day and that he did them at the rate of 18 an hour at least. Do you think in a case like that, there is any possibility of a diagnosis being made at the early stages of these diseases?—I should think it is extremely difficult. A consultant has to work on quite different lines. He cannot get rid of his patients in a few minutes.

12,136. It would be a line which, perhaps, you do not quite understand?—I am sure I could not diagnose a disease in a few minutes, unless it was a very common one.

12,137. Can you give us an idea of the proportion of cases of iritis in the ordinary run of hospital practice that you would consider to be likely to be due to syphilis?—Yes, I should think a good many would be due to syphilis. I have seen a statement somewhere with regard to the number, but I do not quite know where to put my hand on it at the moment. I should say a considerable proportion of cases of iritis are gonorrhœal and a good many others are syphilitic.

12,138. Would you hazard a rough estimate of the number of cases of iritis that are gonorrhœal and a rough estimate of those that are syphilitic?—I should think you might safely say that half of them come into those two classes—keratitis and irido-choiritis.

12,139. You mean half are syphilitic and half gonorrhœal?—No, the two together.

12,140. And the other 50 per cent. are produced by other causes?—Yes, I should think that would be a fairly safe assumption.

12,141. You dealt somewhat generously, or if I may say so, affected to deal somewhat generously, with our friend the quack. I shall be glad if you will give your opinion on the following case: the conclusions to be drawn may be useful to the Commission. I was recently asked to medically report upon a man who was an inmate of one of our large London Hospitals; I found that he was being artificially fed through an opening which had been made in his stomach, because his gullet had gradually closed owing to malignant disease. He had difficulty in breathing, because his windpipe was gradually closing, also from malignant disease, and the surgeon in charge was expecting at any moment to have to perform tracheotomy to prevent suffocation. He had had disease in one of his eyes

six months previously and was treated for many months by a quack with lotions, &c. When he came to the hospital the eye was at once removed, as it was obviously affected by that most rapidly growing of all cancers, melanotic sarcoma. Now the question I want to put to you is: Could the terrible condition this man is now in be the result of secondary infection from the condition of his eye?—I think the post-mortem would show he has secondary growths.

12,142. And if he had had his affected eye removed months ago there was a fair chance of the secondary growths never having appeared?—Yes. I think sarcoma of the choroid demands immediate removal of the eye.

12,143. And when it is immediately removed, the case is very often quite successful and no recurrence takes place?—Yes.

(*Sir John Collie.*) Then if this poor ignorant man had been protected by law from having resort to unqualified and irregular practitioners, he might have been saved a painful and lingering illness which must, of course, end fatally? I shall take it that you agree.

12,144. (*Mrs. Burgwin.*) I think you told us you had 40 beds?—Yes.

12,145. And you had 8,559 out patients in the year?—They are new cases—about 30,000 visits. I expect we have rather more than that.

12,146. Do you think 40 beds are sufficient for cases which would need long treatment?—Syphilitic cases?

12,147. Yes?—Yes, our beds are sufficient for our patients. You see, a very large number of patients can be treated as out patients, and a great many operations are got over and done with. We are generally pretty full. We do not hesitate to take in the serious cases. I do not think there would be any more pressure put on the hospitals. The case is taken in if it is serious enough now; and my contention would be that when these cases are properly treated in the earlier stages we should have fewer of these serious cases.

12,148. You think the syphilitic case would have as good a chance of going in as any other disease?—Certainly. We make no distinction whatever.

12,149. And it is a private hospital?—No, it is a public voluntary hospital.

12,150. Yet I think you consider that the only way to meet the syphilitic cases in a proper way is by a public grant?—Yes, that is because I considered it was important to diagnose them almost before they have shown symptoms and to treat them most energetically. You want more experts than exist, I think, and you want money to provide laboratories; and then the salvarsan treatment at present is very expensive.

12,151. That I fully realise?—If the voluntary hospitals were in a flourishing condition as regards money, I think they would willingly undertake further responsibility; but if this dealing with venereal disease is going to be dealt with in the way I think it ought to be dealt with myself, I think the ordinary doctor is not able to do it, and the hospitals ought not to be asked to do it. The ordinary doctor should consult the consultants. That is all very well for the paying classes, but with regard to the poor, the doctor makes the hospital his consulting room, and I do not think hospitals could really deal with it; at least, I think it would be an unfair tax to put upon them.

12,152. (*Canon Horsley.*) I suppose we may hope that the price of salvarsan will come down in time?—

(*Sir Malcolm Morris.*) I do not see the reason for it.

(*Canon Horsley.*) Things generally do come down in price after having ceased to be new.

(*Witness.*) It is something like 8s. a gramme, is it not?

(*Sir Malcolm Morris.*) It comes to a little less in hospitals.

(*Witness.*) 1l. for two or three injections.

(*Sir Malcolm Morris.*) The doses work out to about 6s. 8d. a piece.

12,153. (*Mrs. Burgwin.*) So that you think a large public grant should be given to these voluntary hospitals who will undertake the salvarsan treatment?

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[Continued.]

—Yes, it would very likely have to be a considerable one.

12,154. We should have to make out a very good case for asking for a public grant to the voluntary hospitals for these special diseases, do not you think? —Yes; but I think the case exists. If the alternative is a grant for a special set of hospitals you will require more money still. My contention is that clinically the voluntary hospitals are capable of dealing with it; but they are not quite capable of dealing with it scientifically.

12,155. I think we all feel that?—That special experience should be paid for, and expensive lines of treatment should be paid for if they are required.

12,156. You do not think by giving a heavy subsidy or a big grant, as you call it, you would be getting nearer the time when the hospitals would become State institutions?—I do not think I should let that weigh with me.

12,157. You would not be afraid of that?—If they have to become State institutions, they must be. But I think that we really must tackle this particular disease.

12,158. I quite agree with you. With regard to the blind children in Bristol in your institution, you take in other than Bristol children, do you not?—Yes.

12,159. So that you could not tell us really whether the number of Bristol blind children is greater or less than it was say 10 years ago?—No, I could not tell you by figures, but I should think, no doubt it is less. I should think probably it is relatively less to the population.

12,160. Our London figures prove that the number of blind children decreases. That is children between 5 and 16 years of age?—Yes.

12,161. And you think that is the same thing in Bristol?—Yes, I think so. I think we have one or two London children in our school at Bristol. We get them from long distances.

(Mrs. Burgwin.) I know you do get some.

(Dr. Arthur Newsholme.) Has the actual number decreased in London, or the number in proportion to the population?

12,162. (Mrs. Burgwin.) We think the actual number; but I have been puzzled at that result from what I have learned at this Commission. One would have expected if the disease were so prevalent that we should not have found it decreasing. I want to ask you this: We now deal with children very promptly, so that do not you think we are preventing the blindness by our very early treatment?—Yes, certainly. I think you will stamp out ophthalmia neonatorum now it is made notifiable; and I believe you will relieve the blind asylums by one-third of their patients.

(Mrs. Burgwin.) That is a very cheering statement. I believe that too.

12,163. (Dr. Arthur Newsholme.) I was not here when you were giving the first part of your evidence; but did you give any figures with regard to the amount of ophthalmia of the new-born in Bristol, or were you not able to do so?—I have given figures I think rather too high.

12,164. Did I understand you to say that that disease only became notifiable on the 1st April of this year in Bristol?—Yes.

12,165. You know that in some towns they adopted local notification earlier?—Quite so.

12,166. Bristol was not one of those?—No; we did not do it until the Act made it necessary. I think the cases have been fairly dealt with, but no doubt this is the right thing to do.

12,167. You know there is a very great deal of variation in the proportion of ophthalmia of the new-born in different towns?—Yes.

12,168. I have in front of me some figures compiled by a medical officer of health. I should like to give them to you in order that they may be placed upon the record. The statement gives the number of cases of ophthalmia neonatorum per 1,000 births in each of the following towns, in the year 1912. In London there were 5.5 per 1,000 births; that is 1 in 200, roughly.

(Canon Horsley.) You are talking of the Metropolis? 12,169. (Dr. Arthur Newsholme.) Yes, the whole of the Metropolis. In Kensington there were 7.1 per 1,000; in Glasgow 10.4; in Paddington, 11.7; in Manchester, 27.6; and in Stoke-on-Trent, 33.4; so that Stoke-on-Trent is about six times as high as London according to the official figures. Of course, that may mean a very big difference in the real prevalence of this disease, or it may mean that in one area the disease is more completely notified than in another?—Yes.

12,170. Or it may mean a combination of those two factors?—Those are cases notified.

12,171. Those are cases notified during 1912. But, still, you would expect, would you not, that the prevalence would vary very considerably in different towns?—Yes, I should.

12,172. In accordance with moral and social conditions?—Yes.

12,173. And in all probability Bristol would have a fairly high prevalence?—Yes. With regard to the notification, I think probably a good many of those cases are not really gonococcal. I think the effect of notification will be quite rightly, that any serious conjunctival condition will be at once reported, and that a portion of those will not be gonococcal; but all the gonococcal cases will be reported because they are the most severe.

12,174. (Mrs. Creighton.) Is not it easy for an ordinary practitioner to tell the difference between the two?—In the early stages you cannot be sure of it.

12,175. Without microscopical examination?—You could not be sure of it in the early stages.

12,176. (Dr. Arthur Newsholme.) I believe I am right in saying that 80 per cent. of the cases notified are gonococcal; is that your experience?—I think probably it would be so.

12,177. I should like to ask you about the use of instillation of a solution of nitrate of silver as a practice, in the eyes of all new-born infants. Are you aware that was practised to a large extent in London, and then abandoned?—I know it was advocated long ago by Credè.

12,178. And Credè's principle was abandoned. Advice was given to the midwives in London in that direction and subsequently altered?—I think it has fallen into disuse.

12,179. Are there not strong reasons why it should fall into disuse? The proportion in the Vienna lying-in hospitals you just now told us was about 21 per cent., but in London it is only half per cent.?—Something like that.

12,180. Why should you torture 99 infants in order that one may be saved from suffering?—I do not know that the proportion is very great; but my answer just now to another question was that I did not think it was necessary as a routine treatment, but I did not see any objection to it. I really do not think the torture is very great; it hardly amounts to that.

12,181. You know in quite a considerable number of the cases that have the nitrate of silver solution instilled still, actual ophthalmia of a slight kind is produced by the solution. The eyelids stick together, and so on?—Yes, an irritative kind of conjunctivitis—a temporary thing.

12,182. An irritative conjunctivitis is produced by the solution?—Yes, it might be; but it very soon passes off.

12,183. (Sir Malcolm Morris.) Would any milder antiseptic be of any use short of nitrate of silver?—I think 2 per cent. is unusually strong.

12,184. Would any other take its place?—Protargol.

12,185. Would not boric acid be enough?—No, it would not replace nitrate of silver.

12,186. (Dr. Arthur Newsholme.) Protargol is much less irritative than the ordinary silver solution, is it not?—Yes.

12,187. And it has been used in place of nitrate of silver?—Yes.

12,188. And also a much weaker solution of nitrate of silver has been used?—Yes.

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[Continued.]

12,189. Still, I gathered your second statement was that in ordinary practice you would not recommend the routine application of nitrate of silver solution?—No. I think it might be as well to give instruction. I think the case ought to be notified in plenty of time; but, anyhow, instructions might be given that where the inflammation seems to be excessive it might be done.

12,190. The instructions to midwives are that they must notify any purulent discharge in the mother, to the doctor?—Yes.

12,191. Would you not think it an excellent rule whenever there is a purulent discharge in the mother, that in those cases some specific antiseptic should be instilled?—Yes.

12,192. Probably that would meet both?—Yes; I think where it was known that there was an unsatisfactory condition of the mother.

12,193. And, even apart from that, is not the usual recommendation to the midwives that they shall wipe the eyes of the child with boric acid lint?—Yes; but the great thing is really not to wash the children's eyes with the towels you have been washing the body with.

12,194. Some surprise was expressed at the infrequency of ophthalmia neonatorum in view of the frequency of gonorrhœa in the mother. I take it that most likely ophthalmia neonatorum only occurs when the child's eyes are opened during the passage in birth—the actual contamination occurs when the eyelids are open. Is that so?—I do not know that. I should hardly think that was a certain rule.

(*Dr. Arthur Newsholme.*) If not, it is extremely difficult to explain why with such a common disease as gonorrhœa in the mother, it is comparatively rare for infants to have ophthalmia neonatorum, or ophthalmia of the new-born.

(*Canon Horsley.*) That is rather my point.

(*Sir Malcolm Morris.*) It depends on the stage of the gonorrhœa, does it not?

(*Dr. Arthur Newsholme.*) It depends much more whether the conjunctiva is exposed to infection or not.

(*Sir Malcolm Morris.*) I think it is the other way. It depends on the stage of the gonorrhœa.

(*Dr. Arthur Newsholme.*) I should like to have Mrs. Scharlieb's opinion as to that; whether it is not a question of the eyes being open.

(*Mrs. Scharlieb.*) I think it has a good deal to do with it if the eyes are open.

(*Sir Malcolm Morris.*) And the stage of the disease.

(*Witness.*) That has a great deal to do with it; but also the activity of the gonorrhœal discharge. As I said just now, nature rescues a good many of these children.

12,195. (*Dr. Arthur Newsholme.*) Quite. You were speaking about the absolute necessity of help to the general hospitals. You realise, of course, that would mean such help would have to be given subject to certain reports being sent to the supervisory authority as to the methods of treatment, and as to the statistics of cases and so on?—Yes.

12,196. You do not anticipate that the hospitals would make any difficulty over that?—I do not think so.

12,197. I do not see why they should. As regards these clinics, you recommended special evening clinics for these diseases. Then I think you also said the department should not have a special name attached to it. If that is so, how would you restrict these evening clinics to diseases of this particular kind?—I think if you had an evening clinic, you would get men there who would not come in the general time very likely.

12,198. But they might come with some totally different disease—a cut head, or ordinary rheumatism, or something else?—There might be a difficulty. You might argue that if that was done you might have the evening clinic ticketed at once. But I think it ought to be understood that the evening clinic is for a certain class of cases.

12,199. I only wanted to elicit the point, in view of the difficulties on the one hand of labelling the department, and on the other hand preventing people of other kinds coming?—Yes. I think you could prevent

the people coming, but I think very little would be said about it. Of course, in a sort of way it would be understood that it was for venereal patients.

12,200. You mentioned that the Town Council of Bristol have not yet done anything to help the medical practitioners of that city in respect to free Wassermanns, or examinations for spirochaetes?—I do not think it has been suggested to them yet.

12,201. Might I mention a fact which is known to me, that quite recently the Medical Officer of Health and a member of the staff of one of the hospitals there came to see me on this subject, and also the Chairman of the Public Health Department, Dr. Wintle, and they went away I understood with the intention of making some proposals on this matter?—I may be wrong; there may have been something done.

12,202. I do not think there has been?—May I ask how long ago your interview was?

12,203. About six weeks ago. It has been suggested that possibly some pressure from you might help the matter along?—Probably my answer is correct, that nothing very much has been done. It may be in contemplation.

12,204. You were asked a little while ago as to the possible occurrence of ophthalmia neonatorum in consecutive infants of the same mother. That you said was very rare, as one would expect it to be, if it ever occurs. But there is also the case of two or three children affected with ophthalmia at the same time in the same family. The new-born baby is affected, and then the older children in the same family get it from that baby. Has that ever come to your notice?—Yes, I have known such cases as that.

12,205. It is relatively rare, but it does occur?—Yes, it does occur.

12,206. You were asked as to subsidies for treating and diagnosing venereal diseases in Bristol. Have you formed any idea as to how much a subsidy would come to in Bristol?—No.

12,207. It is a very difficult thing to form an estimate?—I am sorry that I have not had more time to think this question out more thoroughly; but I have not gone into it from that point of view.

12,208. I have only one more question, and that is the question of schools for mothers. I thought there was some little confusion on that point. You were asked, first of all, as to whether you would advise organised instruction at these schools for the mothers who attended the schools. I think that was the first point?—Yes.

12,209. That means teaching about gonorrhœa to past mothers and future mothers; because very often pregnant women would come to these schools?—Yes.

12,210. Would you advise that?—Yes.

12,211. Then the second point was the teaching of nurses?—Yes.

12,212. That, I take it, could hardly be done at a school for mothers?—No.

12,213. It is more a question for organising instruction for nurses at the ordinary hospitals?—Quite.

12,214. Then surely the most important instruction of all with regard to this disease, gonorrhœa, is the instruction of the midwives?—Yes.

12,215. And the most promising line of help in the prevention of gonorrhœal ophthalmia is the teaching of midwives everything about it?—Certainly.

12,216. So that they could diagnose the vaginal discharge in the mother, in order that they could take all the necessary precautions at birth?—Yes. They are no doubt the people who ought to be instructed.

12,217. (*Chairman.*) Is interstitial keratitis, of which you have spoken, regarded as a curable disease if it is taken in time?—Some cases are curable; but in a large number of cases other structures besides the cornea are affected. As a rule the cornea clears up; sometimes it takes a year; one eye gets affected, and then the other. But generally the cornea is a bit hazy; meanwhile the choroid and the vascular structures are becoming affected, and the iris becomes affected; the pupil becomes contracted and adherent to the lens. Then the structure of the eye is faulty, and other things occur. Of course all these statistics,

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[Continued.]

I think, would be with regard to blind people; but we must remember there is an enormous number of people who are not returned in the census as blind, but who see very very badly.

12,218. (*Sir Malcolm Morris.*) And who have had interstitial keratitis?—A great many of those have had keratitis. A great deal can be done for interstitial keratitis; and I should hope with a more generous use of salvarsan the results may be better.

12,219. (*Chairman.*) But if the diagnosis of syphilis is made clear at an early stage, the probability is that keratitis would never show itself?—At any rate, directly it shows itself it might be hoped that salvarsan would tend to cut it short.

12,220. It does not show itself directly, or soon after infection with syphilis, I understand?—No; interstitial keratitis is very rarely an acquired thing. You do get interstitial keratitis as a manifestation of syphilis. Possibly some of those cases may be congenital; I do not know, but it does occasionally occur, and there are pretty typical cases. But the ordinary case is a congenital case. Then it generally occurs, I suppose, on an average, when they are 7 or 8 or

10 years old. But there, again, I think I may say it does happen that where a child is impregnated with syphilis, and gets ophthalmia neonatorum, you get another type; you get an infiltration of the cornea; and you do not get a good result with these cases unless you give them a mercurial ointment as well as treating for ophthalmia neonatorum. No doubt interstitial keratitis is a very difficult disease to cure.

12,221. (*Mrs. Creighton.*) In a case like that, if there had been reason for suspecting syphilis and the child had been tested with a Wasserman test before anything had shown itself, and treated then, could that have been stopped altogether—the latter disease?—I should think it might not manifest itself. There is another curious thing about interstitial keratitis which rather bears on that. If the syphilitic child gets a blow on the eye, it very often sets up typical interstitial keratitis, which would not have occurred if the eye had not been struck, just as you get a tubercular lesion.

12,222. (*Chairman.*) The probability is, with the proper treatment of syphilitic persons, there will be much less keratitis?—Yes.

(*Chairman.*) Thank you.

The witness withdrew.

THIRTY-SECOND DAY.

Monday, 6th April 1914.

PRESENT:

THE RIGHT HON. THE LORD SYDENHAM OF COMBE, G.C.S.I., G.C.M.G., G.C.I.E., F.R.S.
(*Chairman.*)

Sir ALMERIC FITZROY, K.C.B., K.C.V.O.
Sir MALCOLM MORRIS, K.C.V.O., F.R.C.S.
Sir JOHN COLLIE, M.D.
Canon J. W. HORSLEY.
The Rev. J. SCOTT LIDGETT, D.D.

Mr. JAMES ERNEST LANE, F.R.C.S.
Mr. PHILIP SNOWDEN, M.P.
Mrs. SCHARLIEB, M.D.
Mrs. CREIGHTON.
Mrs. BURGWIN.

Mr. E. R. FORBER (*Secretary*).

Dr. C. THACKRAY PARSONS called, examined by the Chairman.

12,223. You are medical superintendent of the Fulham Infirmary?—Yes.

12,224. How long have you been in that office?—Nearly 15 years now.

12,225. You have made for us some very useful inquiries into what happens in other infirmaries both in London and the country, which we will deal with later on. First of all I want to ask you about the provision in your infirmary. How many cases can you treat in your infirmary ward?—I have two small wards containing 10 beds each, one for male cases and the other for female cases. These wards are used for the primary and secondary stages of the disease. Cases of tertiary syphilis I admit into the general wards, and the accommodation there is large. I have 500 beds in them. Of course, parasyphilitic cases also go to the general wards.

12,226. Is there any objection to the mixing up of these cases in the wards with other diseases?—Not so far as tertiary symptoms are concerned, I think.

12,227. It would not do in the early stages?—I should prefer to keep them in special wards. In some infirmaries patients in the primary and secondary stages are admitted to the general wards; but personally I should not like to do that.

12,228. Do you think your infirmary accommodation, as far as bed provision is concerned, is sufficient for dealing with all the cases that come before you, or that you would like to treat in the wards?—My accommodation at present is quite sufficient; it is never strained.

12,229. What, about, is the total number of patients in your infirmary?—For all diseases?

12,230. Yes?—I have 500 beds; on an average in the winter about 410 would be full, and in the summer about 360.

12,231. It runs up in the winter?—Yes.

12,232. Have you a large out-patient department?—I have no out-patient department at all.

12,233. But you treat all your own cases of venereal disease yourself; you do not send them on to any other institution?—No; they are all treated by us.

12,234. You have been giving salvarsan, or neo-salvarsan since April 1911, and you tell us here of the treatment which you gave. Then you say that you now adopt the method used at Rochester Row Hospital, which treatment we have on our notes. Do you find that treatment on the whole more satisfactory than the earlier treatment you used to give?—Yes. Of course our experience has not yet been sufficiently long to say what the end results are going to be. But the results we have had so far are certainly better than they were when we were using salvarsan in smaller doses and without mercury, as we started using it.

12,235. Then as far as you have gone, you are satisfied with the treatment given at Rochester Row?—Yes.

12,236. In your other paper of returns that you have received from Poor Law infirmaries, you rather indicate that the treatment varies very much in infirmaries. Do you think that is desirable?—I think there is still room for individual differences as to

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[Continued.]

the best methods of treatment, as to the exact way in which salvarsan should be given, as to doses of it, and as to the periods which should elapse between the doses. I have been very pleased with the results we have had from the system which was instituted first at Rochester Row; and until I find reason to alter my opinion, I shall continue to use it myself.

12,237. Do you think it would be desirable that the Local Government Board should issue an instruction, or advice merely, to all infirmaries to try the treatment as prescribed at Rochester Row?—Yes. I think a circular letter from the Local Government Board giving the results which have been obtained with the treatment adopted at Rochester Row would be useful.

12,238. Otherwise you get every infirmary possibly experimenting on its own account?—Yes.

12,239. And, perhaps, going rather off the rails?—Yes. I think we have all been feeling our way in the last few years.

12,240. You have given us some printed notices. Are these given to all patients infected with these diseases?—To all primary and secondary cases of syphilis and to all cases of gonorrhœa.

12,241. The only criticism that occurs to me about them is, that you do not seem to me to make the disease alarming enough. You warn people of what may happen, but you do not point out quite sufficiently the very grave results which may come from sexual intercourse during the course of this disease?—No. My main object really in giving these warnings was to impress upon the patient the fact that the disease was infectious and the methods by which the disease is most commonly spread.

12,242. Your warning is rather directed to the individual, and not to the possible consequences of the action of the individual upon other people?—That is so.

12,243. That seemed to me to be a criticism which might be applied to those papers. Now what use do you make of the Wassermann reaction?—In doubtful cases a specimen of the blood or the cerebrospinal fluid, as the case may be, or both, is sent by me to the Wassermann Institute.

12,244. The number of tests that you have made of that kind in the course of the year does not seem large?—No, it is not as many as I should like it to be; but of course I am guided there by matters of expense, and I have to be guided in that way. I send only those cases in which there is very strong reason for wishing to get definite evidence as to whether the patient presents a positive or negative reaction. If I could get these examinations made for me without expense, the number I should send would be considerably increased.

12,245. In addition to testing people who gave signs of these diseases, would you send testing material in general cases in your infirmary which might have a syphilitic or gonorrhœal origin?—Undoubtedly; I should send specimens, for example, from all those cases in which I thought syphilis might be a factor in the disease.

12,246. If, therefore, you could get these tests made for you free of expense, you would make a very much larger use of them than you now do?—Certainly.

12,247. And you think it would be very useful to have that?—Very useful. Then again I have never checked my results from the salvarsan treatment by means of the Wassermann reaction on account of the expense, and that is another matter I should very much like to do.

12,248. In fact you would like to go on testing the patient until you thought you could pronounce him cured as giving a negative reaction?—Yes.

12,249. In all your treatment with salvarsan or neo-salvarsan given apparently from April 1911 to the end of 1912, you had a total number of 194 injections, and you say that no really bad results have ever occurred from that treatment?—No, no really serious results. When we started using salvarsan, cases occurred in which the temperature rose to 100° or 102°, occasionally with a rigor, and the man felt ill for 24 or 48 hours; but we never had anything worse than that.

12,250. Now you are satisfied that with the treatment as you use it, there is no real danger to life?—With neo-salvarsan, which we have been using now almost exclusively for about a year, the reactions have been very much less, and we have really had no reaction of any moment at all. In addition to those numbers, since the beginning of this year we have given 54 further injections practically all of neo-salvarsan, and in those cases we have had no severe reactions at all.

12,251. You have given us a statement of the patients admitted during the year ending March 31st, 1913. Totalling them all up, I make out that there were 155 new cases of both these diseases admitted in that year. How do those 155 stand to the total admissions for all causes in that year?—In 1913 we had 3,160 admissions of all diseases.

12,252. And of that number 155 were diagnosed as either syphilis or gonorrhœa. Is it possible that among the other patients not so diagnosed, syphilis or gonorrhœa or its sequelæ may have been present?—No, I think not. I think the list I have given you includes all the cases we have had, at any rate as far as primary and secondary syphilis and gonorrhœa are concerned. The statistics with regard to tertiary syphilis may be open to more question.

12,253. Supposing you had the Wassermann test freely applied, you do not think you would discover a good many more cases, latent or otherwise?—No, not many more. It might have increased those coming under the head of tertiary syphilis.

12,254. Do you have many nervous diseases in your infirmary?—Yes, a great number of nervous diseases.

12,255. Of those diseases are many attributable to syphilis?—Not so very many. I have placed upon the paper here the chief ones. We only had ten cases suffering from tabes dorsalis, and only six suffering from general paralysis in the infirmary. The total number of nervous cases we had during that year was 232. That is of all forms of nervous disease.

12,256. Admitted in that year?—Yes.

12,257. If you had had the means, would you have had all those people tested by the Wassermann reaction?—No, not all of them.

12,258. A considerable number, perhaps?—I should think about 50 of them.

12,259. You would not have done it unless you had some clinical indications of the presence?—Yes, some reason to suspect it. It would be more than 50; I think I should have submitted about 100 to the Wassermann reaction.

12,260. In this detailed statement you have given us of the cases, I do not see any primary sores at all. Does that mean the patients do not come to you ever in the primary stage?—Throughout 1913 we did not have a single case admitted with a primary sore only, and it is quite rare for us to get a case admitted at that stage. They practically all come in the secondary or tertiary stages.

12,261. That means, therefore, that a great many of these people who come to you afterwards, have been infective for a considerable period and may have helped to diffuse the disease widely?—Yes.

12,262. Do you find the reluctance to come vanishes only when extreme inconvenience occurs to the patient?—I think so.

12,263. That brings them to you?—Yes.

12,264. That when they find the beginnings of a sore they neglect it, and do not think it necessary to bring them to an infirmary?—Yes.

12,265. You say your results have been most striking in acquired syphilis and less successful in cases of congenital syphilis. In what form has congenital syphilis presented itself mostly? Do you get it in children?—Yes, in babies and in older children.

12,266. Are babies born in your infirmary?—Yes, we have a maternity ward.

12,267. And in any case where the baby is found to be syphilitic, do you treat the mother at once?—Yes.

12,268. Are inquiries made into the family history?—Yes, I always make inquiries myself with regard to most of these cases of women confined in the infirmary.

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[Continued.]

12,269. You say that parasyphilitic conditions receive only temporary relief from salvarsan, but you have introduced the method of Swift and Ellis. Has that been successful in your practice?—I have used it in very few cases, in fact four cases, and I had another case the other day. In two of them I thought it was of distinct benefit. One of them, especially, a man with tabes dorsalis, expressed himself as being considerably improved by it. But I am afraid my experience is far too little to come to any conclusions upon it.

12,270. But you are going on with it?—Yes. I shall go on with it.

12,271. For some time?—The last injection I gave, I gave neo-salvarsan directly into the spinal canal instead of the serum—an extremely weak solution.

12,272. Then your general treatment is to send the patient back to bed for twelve hours after injection?—Yes.

12,273. But your main difficulty is, you say, to get the patient to go on taking salvarsan?—Yes. It has not been so very frequently, but some of the cases after the first injection have refused to have a second. It has more commonly occurred in the case of women than men. Many of them again object to the mercurial injections; but one is usually able to persuade them to go on. Then some of them decline to stay in for the whole three months. Directly the lesions are healed they want to get back to their work and they insist on going out.

12,274. Does not that mean that a great many of these cases treated become subsequently just as infectious as they were?—Yes. They relapse and some of them come back to us; but most of them we lose sight of entirely.

12,275. Having spread the disease meanwhile. So that it is exceedingly important, is it not, that these people should continue their treatment until you pronounce them non-infective?—I think so.

12,276. How is that to be provided for?—I think it is a very difficult matter. One does not want to make compulsory detention general, for I think that again would raise further difficulties; but I think it would be an advantage if we had power at the back of us to apply in special cases where the man insists on taking his discharge against our advice, and we could obtain an order from a magistrate as one can in a case of some infectious diseases, empowering us to detain the person.

12,277. But as a matter of fact you would not wish to detain him, you would only wish to get him at specified times to go on with the treatment?—Yes.

12,278. That would satisfy all requirements?—That would satisfy us. At present, of course, we keep the patient in, if he will stay, for the whole of the three months. We do not arrange for him to go out and come in again. That I think would be desirable and might safely be introduced, but it is a method we have not employed so far.

12,279. But you do think the present state of things is exceedingly unsatisfactory?—Yes, it is.

12,280. Your giving your treatment, then the man going out, and the disease reviving when he becomes just as much a danger to society as before?—Yes.

12,281. That is a great flaw in the system, is it not?—Yes. We have no check at all upon them. After they leave us, we never see them unless they come back to us with a relapse. We do not know what the further history is.

12,282. Supposing it was known that any form of compulsion for taking further treatment was going to be enforced, would that prevent these people coming to you at all?—That is the danger. That is why I think compulsion should be kept in the background and only used in exceptional cases.

12,283. And if you notified any case in which you discovered syphilis or gonorrhœa to the health authorities, would that also keep people from going to the infirmary?—If the medical officers made use of the notification to visit the homes of the patients or to keep them under observation, I am afraid it would tend to deter them. I do not think there would be any

objection to it if it were used merely for the purposes of statistics.

12,284. I think you have rather more gonorrhœa cases than syphilitic cases, have you not?—No. We have rather more primary and secondary syphilitic cases than cases of gonorrhœa. In the year ending March 31st, 1913, we had 26 cases of the former against 19 cases of the latter.

12,285. What treatment are you now giving for gonorrhœa?—Irrigations locally, and we use copaiba by the mouth as routine, and sometimes other drugs by the mouth instead.

12,286. Is that efficacious?—Yes. Of course gonorrhœa is a troublesome disease and returns after one thinks one has stopped the discharge. But I have found irrigations more useful than the treatment we used to use of simple injections.

12,287. Do patients suffering from gonorrhœa come to you generally speaking in a rather advanced stage?—Many of them do not come to us until the discharge has been going on for many weeks. We get a certain number who come in within the first two or three weeks; but it is quite uncommon to get them coming in directly the discharge appears.

12,288. Do many people leave the infirmary still in an infective state?—Yes; more so in the case of gonorrhœa than in the case of syphilis.

12,289. You say: "It would probably be an advantage if all cases of syphilis applying for Poor Law relief were sent into an infirmary to receive a course of salvarsan treatment." I suppose you mean by that that the practice in some infirmaries is to send out these cases, and you prefer that all the infirmaries throughout the country should be able to treat them?—No, I did not quite mean that. I think that in some cases the patients are treated by the district medical officer at their own homes or by their attending at the station of the district medical officer. Under those conditions I should say that probably none of them get salvarsan treatment at all, but are all treated by mercury or other methods. I think certainly it would be an advantage that all such cases should be sent into the infirmary so as to have injections of salvarsan given to them.

12,290. Would the objection to going on with the salvarsan treatment exist in its present form if the salvarsan treatment could be given out of working hours for the convenience of the working classes?—I think it would make it less objectionable to many of our patients if we could arrange some such system as I suggest, so that they could come in just for their injections, and after the lesions present had disappeared could then be allowed to go home and return weekly to receive their other injections; say, come in on the Saturday and stay over Sunday and be discharged on Sunday night.

12,291. Do you think it is really loss of working time or the dislike of the administration of salvarsan which keeps them from coming back to you?—Both have an effect. In some cases it is the injection that they object to. In other cases it is the fact that they want to get back to work. I think there are many cases that would be quite willing to come up for treatment at specified times if arrangements were made for that purpose.

12,292. Do you think while under treatment or from these papers you have given them, patients really learn enough about the extreme seriousness of these diseases?—I am very doubtful whether in these cases the papers have much influence upon them at all.

12,293. And if it could be impressed upon them with sufficient force, they would be more ready to come and take further treatment, especially if it is given in evening clinics?—Yes, I think it would be an advantage.

12,294. You say: "One of the greatest needs of the Poor Law infirmary in connection with venereal disease is the provision of facilities for the examination of the blood or cerebral spinal fluid for the Wassermann reaction." I understand you do not wish that every Poor Law infirmary should be able to make these tests, but that every Poor Law infirmary should have access to some laboratory where the tests

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could be properly made either free or at a small cost?—Yes. I think as far as London is concerned if we had a central laboratory to do our tests for us, it would meet all our requirements at a less cost than we have to pay now individually, and with more advantage to ourselves, because we could get into touch with the pathologist who is actually doing the work for us.

12,295. And that would be more economical than building up your present small bacteriological laboratories?—With the staff of a Poor Law infirmary, it is practically impossible to get these tests properly carried out in the great majority of cases. Occasionally it happens one has a man on the staff who is able to do them; but in the majority of cases we have not, and to set up a pathological department in each infirmary would be an extremely expensive matter.

12,296. There is not really whole-time work enough?—Not as far as these cases are concerned; but if you extended it to all the pathological work in infirmaries, in many of the large infirmaries there is quite enough pathological work to occupy the time of one man.

12,297. He could cover the whole of the bacteriological cases?—Yes.

12,298. Now I come to some returns from other infirmaries. You applied to 29 separately administered infirmaries in London, and you got answers from 26. They show that 15 of these have small lock wards with accommodation for 121 male patients and 154 female patients. In five of these infirmaries cases other than venereal are admitted to the lock wards; in three infirmaries a female lock ward only is provided, and in one a male lock ward only. In the latter infirmary, the female cases are placed on one side of the phthisis ward. That shows a great deal of diversity in the administration of these infirmaries in the cases of these diseases, does it not?—Yes.

12,299. Do you think more uniformity would be desirable?—Yes, I do. Personally I think it would be an advantage if the cases were sent only to certain infirmaries rather than that they should be spread over the whole 29 infirmaries in London.

12,300. You would rather strengthen some of the infirmaries in the direction of dealing with these diseases and let other infirmaries pass their patients on to them?—Yes, that is my own view of the matter. Of course there would be difficulties in the way with regard to payment, but they are not insuperable.

12,301. In the other infirmaries you say the venereal cases are sent to the workhouses of the unions, to the lock hospitals, or in the case of men to the Bow Institution. You do not do that, of course, in your infirmary; but do you know whether they like being transferred to a lock hospital?—I do not know. I have no information on that.

12,302. When you say they are sent to the workhouse or a lock hospital, do they go, or are they only told to go?—In the majority of cases I should think they go; but there again I have no information. One cannot compel them to go. If they refuse to go they could not be compelled to go.

12,303. They are simply advised to go. They are told: "We do not take these cases here; you had better go to the Bow Institution or to the lock hospital"?—No; I think in the majority of cases they are told they will be sent and they are sent. If they refused, I take it they would be discharged. I do not think there has been much trouble in that respect; but I have no information on that subject at all.

12,304. But in all these cases, just as in the case of your own infirmary, the weak point is that men go out and still are, or afterwards become, infective?—Yes; that would apply to them all.

12,305. Then you say that many of the workhouses have special lock wards?—Yes.

12,306. Is the treatment in those workhouses as good, and are the facilities as great, as in an infirmary?—I am sorry I have no information on that score either. I could not express an opinion.

12,307. Then you give us the variety of the routine. You say the Wassermann test is used in 13 out of the 26 infirmaries who reported to you?—Yes.

12,308. So that half of the infirmaries who have reported to you make no use of this test at all at present?—Yes.

12,309. Is that because they have not the facilities or they have not the money, or that they do not know the value of the test?—I think the main obstacle is the question of expense. They do not like incurring the expense of having them done in private laboratories, and they have not anyone on the staff who is capable of doing it.

12,310. Would guardians object to the expense if it were kept down to the minimum?—I think in some cases objections would arise.

12,311. You say the fee varies from 10s. 6d. to two guineas. That is rather a remarkable variation, is it not?—Yes. I think that depends mainly upon whether the medical superintendent has made an arrangement with the private laboratory. In most cases where a single test is sent the usual fee is two guineas; but one can easily make an arrangement with the manager to reduce that fee, and in many cases I have no doubt an arrangement has been made. For instance, the fee of the Clinical Research Association is usually two guineas; but I believe in some cases they will reduce that fee if a certain number of tests are sent during the course of a quarter.

12,312. You say that lock patients in the infirmaries are not subject to any special restrictions apart from isolation. That does not mean that such precautions as are necessary to protect other patients are not taken?—No; they are kept isolated in the wards, but they have no other restrictions imposed upon them in the way of diet or special work or of a punitive nature, or measures of that kind.

12,313. In the matter of utensils and those sort of things, is adequate care taken that other patients do not use them?—Yes. In the case where the ward is separate the utensils do not leave that ward at all; and special precautions are taken with regard to bathing and lavatory accommodation.

12,314. At all those four London infirmaries that you have given us notes of, do they treat all their own venereal cases without sending them anywhere else?—None of those four send their cases to lock hospitals or anywhere else.

12,315. According to those figures you have given us, Fulham has 114 venereal cases in the year—of course, that is not including the parasymphilitic cases—Lambeth has 98, Hackney has 35, the Central London Sick Asylum has 23. Is the much smaller number in the other asylums compared with yours due to their being smaller infirmaries, or do you think it is the amount of disease that comes out?—I should not like to found any conclusions upon those figures. With regard to the Central London Sick Asylum, the numbers are for three months only. In the case of Fulham, I have included all forms of disease which might be attributable to syphilis, and as to which I was convinced the manifestations were due to syphilis. In Hackney I have only returns for primary and secondary syphilis. I have no returns of tertiary syphilis, and no returns of nervous diseases which might have been due to syphilis. In Lambeth again, those figures are only primary and secondary syphilis, and not tertiary syphilis.

12,316. From what you know of the London infirmaries generally, do you think their facilities for treating such disease as would come naturally to them are now sufficient, except in the matter of tests and in the matter of salvarsan treatment?—As far as syphilis and gonorrhœa are concerned?

12,317. Yes?—Yes, I think so. Of course one notices that some of the infirmaries have no lock wards at all, which is a great disadvantage—a great disadvantage I should think administratively.

12,318. The point I want to get at is, what is wanted in these infirmaries is not more beds and not more space, but more facilities?—Yes. As far as the number of beds is concerned, the pressure upon the accommodation, in the great majority at any rate, is not great. It does not prevent them providing beds for the purpose, except in certain infirmaries where the pressure of accommodation does become great in

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winter. At Poplar and Stepney, for instance, I know their numbers vary, and frequently exceed their certified accommodation.

12,319. You think that every infirmary should now be able to give salvarsan treatment?—Yes, I do not see any reason why they should not.

12,320. You think that should be universal?—Yes.

12,321. And you also think that any infirmary should be in a position to have any tests it likes made?—Yes.

12,322. You got replies from 16 out of 18 of the chief provincial infirmaries, and 11 out of those 16 had special accommodation for these cases?—Yes, for 153 women and 93 men.

12,323. In the case of five of those 11, female lock wards only are provided in the infirmary, the men being sent to the workhouse?—Yes.

12,324. I think you told us you did not know much about the treatment in the workhouses?—No.

12,325. And when salvarsan or neo-salvarsan is used, the men are admitted to the infirmary for two days. Other infirmaries send some or all of their cases to lock hospitals. It is evident that in the provincial infirmaries, as in the London infirmaries, the methods are not uniform, but vary quite considerably?—Yes.

12,326. And also the method of treatment as you told us?—Yes.

12,327. The Wassermann test is used in only five out of the 16 infirmaries from which you got replies; the rest have nothing to do with it?—That is so.

12,328. In Birmingham, arrangements are being made to send all Poor Law male venereal cases within the union to the Western Road House, where a new block is being put in order for their treatment. Apparently in Birmingham the Wassermann test is carried out by the guardians' own pathologist, and has been applied in over 500 cases. Probably, as far as Birmingham is concerned, it is well off as far as testing goes?—Yes; it is very well arranged indeed.

12,329. Then you have given us a table of cases. Taking the tables: West Ham has 52; Birmingham, has 154; Birkenhead has 56; Bradford, 221; Leeds, 114; Portsmouth, 262; Salford, 71; Sheffield, 215, and Middlesbrough, 62. Do you think those comparative figures give any indication of the comparative existence of the disease in those big cities?—No, I am afraid not. Of course the populations vary a great deal, and I do not think that the returns that have been made under those heads are strictly comparable.

12,330. Portsmouth stands out above all the others, which is perhaps what we might expect. The next to it comes Bradford, and the next Sheffield. You do not think that gives any indication of the proportion of these diseases to population in these particular patients?—No, I do not think so.

12,331. What class of people go to your infirmary?—The very poor in the majority of cases.

12,332. None of them can afford anything for their medical treatment?—No, none of them.

12,333. Since the passing of the Insurance Act, has there been any impression produced on the numbers who attend your infirmary?—No, not the slightest.

12,334. You have not found the least effect?—No, no reduction at all.

12,335. You have found no difference?—No. Our numbers of admissions as a matter of fact are slightly larger than they were the previous 12 months.

12,336. Does that mean that the classes for whom you provide do not go to panel doctors?—They go; but where their disease is such that they have to be treated in bed, they are unable to provide the proper treatment at home or get the proper nourishment at home whether insured or not.

12,337. Have many of the patients who come to you been first to a panel doctor?—Yes, quite a number.

12,338. (*Sir John Collie.*) With regard to this last point, I suppose you are aware that insured person under the National Health Act suffering from venereal disease are entitled to medical attendance but not to sick allowance?—Yes.

12,339. Would that not therefore be the reason for their seeking indoor treatment when they have lost

their work and are not getting the insurance money?—Yes. As far as venereal cases are concerned, I have no doubt that would have an influence; but in answering that question, I was dealing rather with the whole of the admissions than with the special venereal admissions.

12,340. But it does apply specially to venereal cases?—Yes.

12,341. Then I notice you say that only 14 out of the whole 29 infirmaries are using modern methods of treatment by salvarsan or neo-salvarsan. Does that mean that all the others are treating their cases in the old way?—Not quite. Of course, this is 14 out of 26. There were three from whom I had no inquiries, and I do not know about them. But of the remaining 12 of the 26 from whom I had answers, many of them are sending their cases to the Lock Hospitals; so that their cases will be treated at the Lock Hospitals with salvarsan.

12,342. Then there is no sort of method of discovering whether these people who are advised to go to a lock hospital have gone or not?—Yes; because if they go, the cost of their maintenance at the Lock Hospital is charged to the guardians, and the guardians know whether they have gone or not.

12,343. But surely with the limited accommodation as I have seen it at the Lock Hospital, it would be almost hopeless to expect that all the venereal cases transferred even from a few of the infirmaries could be accommodated there, assuming they did go?—Yes; the point has always occurred to me. I do not know how these 12 infirmaries get their vacancies at the Lock Hospital for male cases. Of course, there is more accommodation for female cases.

12,344. So that really it amounts to this. It is the expression of a pious opinion that they ought to be treated, and treated at the Lock Hospital, and there the matter ends?—I really cannot say definitely whether that is so or not.

12,345. Do you mind saying whether that is your suspicion?—Certainly, that is my suspicion.

12,346. Then, with regard to freer Wassermanns, I notice you said you did not have opportunities of having the blood tested after a course of treatment; that you could not afford it?—That is so.

12,347. I take it that is really a very important point from your point of view; that it would be very much more satisfactory in every way if after treating a case you could know whether in fact you had been successful or not?—Yes, undoubtedly.

12,348. So that you would welcome any facilities given you for freer opportunities of obtaining the Wassermann reaction?—Yes, I should. If I could get the Wassermann reaction done without any cost, I should use it in far more cases than I do. I have no doubt I should use it in about 300 cases every year, and quite possibly more than that.

12,349. And the effect on your patients would be marked, inasmuch, as I take it, you would probably discover that large numbers of those require a further course?—Yes, it would be invaluable in testing our results.

12,350. In your experience amongst the working classes, do you think many of these people can really afford anything like 12s. 6d. three times, and 1s. or 2s. in addition, which is the lowest fee, I understand, charged at hospitals for salvarsan injections. Is it not practically out of their power to do that, as a rule?—In the majority of our cases I should say it was quite impracticable.

12,351. With regard to the question of not having power to detain, I understood you to say it would be sufficient for all practical purposes if these people would come back. But is it not a very serious question whether they would really come back; and if you had nominal power even to make them come back, with the constant changes of address, and so forth, in London, do you not think it would be practically impossible?—It is a very difficult thing indeed to get them to come back.

12,352. So that if you once lose touch with them, they are practically free to distribute the disease if they like?—Yes. A scheme that I think would be

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efficient would be that when they first come they should be kept until all lesions had healed, and after that they should be advised to return weekly, and they should be kept under observation by the relieving officer.

12,353. But if they simply went, say, from Fulham to Chelsea, or to Hornsey, it would be out of the question?—Yes. In the present state of things it would be very difficult to follow them up.

12,354. In answer to his Lordship, you said there were more cases of syphilis than those you had mentioned. Did you include in the syphilitic cases all cases of tabes and G.P.I.?—Yes, all cases of tabes and G.P.I. at the infirmary.

12,355. We have had evidence before us of where the Wassermann reaction has been taken in a mixed community, a very considerable proportion who were apparently well and who showed no evidence of primary or secondary syphilis, did in fact react. Do you not think that the same proportion at least would obtain in the inmates of your other wards in the infirmary, and who were really suffering from latent syphilis, which is quite undetectable clinically, but will be none the less present?—Yes, I think that would be so.

12,356. So that there is a larger proportion of syphilis than you have estimated, and at any rate larger than you have diagnosed?—A larger proportion giving a Wassermann reaction, which I may take it points to the fact that there is latent syphilis. But I do not think I have missed any cases showing active signs.

12,357. No; that is the point I want to bring out. I wanted to make it quite clear that that did not necessarily represent all the syphilis in the infirmary?—No; this represents those showing active lesions of some form or other.

12,358. I do not want to criticise your warnings as to syphilis, because I think they are very good; but in addition to what the Chairman suggested that you do not quite emphasize the dangers sufficiently, do you not also infer that two years' treatment is quite enough? I do not say it may not be under certain circumstances; but do you not rather give the idea to an ignorant person that if they undergo two years' treatment, they are then cured?—You say it twice, in No. 1 and No. 6?—I think, for practical purposes, if one could impress upon them the fact of the peril lasting for two years, it would be a great thing. Of course, most of our patients look upon the disease, even if they know it is infectious at all, as being infectious only during the time they actually have the primary sore, and they regard the secondary manifestations as certainly not infectious.

12,359. Quite; and I think from that point of view your Paper is admirable. But do you not think in addition, unwittingly, you rather suggest to them that two years' treatment is enough? The suggestion is that two years' treatment does, in fact, cure the disease?—Yes, that might certainly be modified usefully.

(*Canon Horsley.*) Leave "two" out and say "for years."

12,360. (*Sir John Collie.*) "A long period of time." There is a little error I would like to draw your attention to, that I think you have stumbled into unwittingly. You say you now carry out the treatment such as at Rochester Row. It may be they have modified their treatment since you started your latest method; but it is not exactly what we were told. For instance, I see you have .9 grammes. I think we were informed by Major Gibbard that he started with .6?—Yes. As a matter of fact, it is not strictly correct to say it is the method used at Rochester Row; because they use salvarsan, and we are using neo-salvarsan.

12,361. Then it is a dose of neo-salvarsan?—A dose of .9 grammes of neo-salvarsan would correspond with .6 grammes of salvarsan.

12,362. That is the explanation of it; that you use neo-salvarsan and they use salvarsan?—Yes.

12,363. Because you think it is safer?—Yes.

12,364. (*Rev. Dr. Scott Lidgett.*) Do I understand you recommend that every infirmary should give con-

tinuous salvarsan treatment, or that certain of the metropolitan infirmaries should be specialised for that purpose?—My own opinion is rather in favour of the latter view; that certain of them should be specialised to undertake the treatment.

12,365. I suppose the staff of a good many of the Poor Law infirmaries is hardly generous enough to provide thorough treatment of this kind?—Yes; that is the difficulty in many infirmaries.

12,366. And therefore if a system of transfer could be arranged to certain central institutions, it would be more economical and more efficacious?—Yes.

12,367. You say a number of these cases are at present dealt with in some of the metropolitan workhouses. You would not suggest that the community ought to be content with such treatment?—I have no information, I am sorry to say, about what the treatment is in the workhouses, and I do not know how far it is carried out, efficiently or not.

12,368. But must it not be inferior with regard to the general conditions—the isolation of the premises and so on, to say nothing of the medical treatment—as compared with what would be given in a first-class infirmary?—I should think so. But I would not like to express an opinion, having no knowledge really of the condition of things in the workhouses in these cases.

12,369. When you advocate this system of supervision, I suppose it is to apply to the existing class of Poor Law patients?—Yes. I could not say anything about any other class.

12,370. You do not intend to suggest that the Poor Law infirmaries and, say, general hospitals, should be treated as covering the whole demand?—No; I confine myself to the cases we get now, without any thought of extension.

12,371. When you speak of keeping cases under observation by the relieving officer, what exactly do you mean?—I mean simply if a case is discharged from the infirmary and told to come up next Saturday, and he does not come up, the relieving officer could then visit on the Monday and find out why he did not come up, and make him present himself if he can.

12,372. (*Canon Horsley.*) One difficulty with regard to the staff of the infirmaries is that it is not quite adequate in numbers in some places; and another difficulty is because sometimes the junior members of the staff are rather neophytes, are they not?—Yes.

12,373. I have had to do with the appointment of such officers. You get the very best man for the head, but you get whoever you can for the second and third?—Yes.

12,374. The salary paid is not very high?—The salary is not sufficient to attract the best men.

12,375. And you get a man who is rather glad of the time for reading to come there?—Yes.

12,376. Therefore that would be rather against having salvarsan or something of that sort in every place, would it not?—Yes; I think it would make it easier if certain infirmaries were specialised to give the treatment.

12,377. Have you two assistants?—I have three.

12,378. You are a small infirmary. You said the average was 410 beds occupied?—Yes, 500 beds, and the average occupied is 410.

12,379. You are well off. I have been connected with one for a great many years where we have 700 beds and only three doctors?—Yes. Of course, I have a workhouse as well.

12,380. But does the workhouse include the 410?—No; the workhouse is additional.

12,381. Then you have both the workhouse and the infirmary?—Yes; but I do not keep any sick cases in the workhouse.

12,382. Even in the case of a large one like the one at Southwark I have been connected with, where there are 700 beds and 80 nurses, and so forth, however much confidence you had in the head doctor, you would not have the same in the assistants?—Our assistants vary very very much. Sometimes we get extremely good men.

12,383. But you do not keep them?—They do not stay long.

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12,384. You say that in one case of an infirmary female cases of syphilis are placed on one side of the phthisis ward. Surely that is a most undesirable thing, is it not?—Yes. It only applies to one infirmary, and the medical superintendent of that infirmary told me it was the best arrangement he could make, and that when he first went there he found all the venereal cases were scattered indiscriminately throughout the wards. He placed on one side one small ward for the male cases, but he was unable to provide separate accommodation for the female cases; so that he has done the best thing by keeping them to one side of the ward, with special lavatory and bath accommodation.

12,385. When you speak about the cost of the tests being from 10s. 6d. to two guineas, we never paid more than one guinea at some institutions, the names of which I forget; but the difficulty there is that some guardians would begin to kick if you sent in a bill for so many tests. They are impatient about that. They are always looking to see if they can cut down expenses?—Yes.

12,386. You would be told you must not be so generous?—Yes; that is the trouble.

12,387. With regard to these varying cases of different towns, although, of course, you have not full particulars, it is a striking fact that if you compare Portsmouth and Salford, which happen to have exactly the same population, or very nearly the same, Portsmouth having 232,000 and Salford 231,000, in the one case you get 262 cases, and in the other only 71, suffering from these diseases. According to that, it is rather more than three times as bad as Salford?—I had a letter from the Medical Superintendent at Salford which bears somewhat upon that. He says: "For a seaport on the Manchester Ship Canal, and an urban area, there is surprisingly little venereal trouble up here. I mean, apart from the work done at this institution, the general practitioners in the town tell me they see very little of it."

12,388. On the other hand, in Portsmouth it is enormous?—I have a letter also from Portsmouth, in which the Medical Officer there says he gets "far more female cases than male cases, and many of the female cases are strangers and come from other seaports; the most feasible explanation being that a girl in another seaport gets infected, the fact becomes known, and she migrates elsewhere."

12,389. Sir John Collie mentioned about the two years stated in this paper. Five years seems rather a safer period; but I suggest if you left the numeral out, that would meet the point, would it not?—Yes, that would meet the point.

12,390. With regard to gonorrhœa, one reads in this way: "No wine, beer, or spirits of any description should be taken while discharge continues." Then when you come to syphilis, you rather suggest that wine and beer are tolerable, and you exclude only spirits. But is not alcohol a criminal whatever his alias is? It is the same criminal that does harm, is it not?—Of course in gonorrhœa you have a definite result from the use of alcohol, in the way of increasing the irritation and the discharge, which does not apply to the same extent in syphilis. Of course excess of alcohol is bad.

12,391. In both cases we have been told it tends to lower the power of resistance to that or any disease. Would it not be as well to have the same remark with regard to alcohol in one case as in the other?—Yes; I do not think I have said anything about alcohol as regards syphilis. Of course in including that in the gonorrhœa paper, as a matter of fact, I was looking simply upon the effect of alcohol upon the discharge itself, without any regard to the alcohol as a general cellular poison.

12,392. (Mr. Philip Snowden.) I understand yours is a Poor Law infirmary?—Yes.

12,393. Have the patients who come to you, first of all, to get an order from the relieving officer?—Yes; they are supposed to, and they practically always do.

12,394. In cases of urgency you can admit a case without the relieving officer's order. Are they in any proportion the class that is always on and off the Poor

Law?—No. Some of these cases I think would not, apart from the disease, come under the Poor Law at all.

12,395. Does treatment in your infirmary disenfranchise the men?—Not in the infirmary.

12,396. If they are not people who are very much deterred from applying to the Poor Law for relief, what would you say was the reason why they prefer to come to you rather than go to a general hospital or infirmary?—In most cases it is the fact that they cannot continue their work that they come to us.

12,397. (Cannon Horsley) And sometimes because they cannot get into hospital?—Yes.

12,398. (Mr. Philip Snowden.) You have been using salvarsan for three years you say?—Yes.

12,399. And you have had no cases of very serious results from the use of it. Have you kept in view some of the early cases in which you used salvarsan?—We do not see them after they leave us, unless of course they return. Occasionally we have had some cases return. As a matter of fact in some of the early cases in which we were only giving two injections without any mercurial treatment, they came back to us with fresh lesions. But apart from re-admissions we are unable to keep in touch with our old cases.

12,400. Then you have had no case where some other trouble has arisen that you would attribute to the use of salvarsan?—No, none at all.

12,401. And if the patient were willing to stay in the infirmary, how long would you keep him there?—For the three months necessary to carry out our course. Then I should like to have a Wassermann test taken, and the future treatment would depend upon the reaction obtained then. I should like him to appear again in about six months for another test to be taken.

12,402. You have been asked to amend your note of warning to read that the treatment ought to be continued for years. How is a patient to carry out an instruction of that sort?—Not treatment; but the risk of the disease recurring, I take it, was the opinion expressed: that the period in which it might recur should be greater than two years.

12,403. But surely if there be a risk of the disease recurring, is that not evidence that the disease has not been cured?—Yes.

12,404. Then is it not desirable that treatment should continue until the disease is cured?—The only criterion we have whether a disease is cured or not at present is the Wassermann reaction, apart from the actual presence of lesions.

12,405. You said just now that at the end of three months you would take this Wassermann reaction. In case it gives a negative result what conclusion would you draw from that?—That for the time being a man was cured. I would not say the reaction is not going to become positive again.

12,406. Then am I to assume from that it is possible to cure a case of syphilis in three months?—Yes; I think you might say it is possible.

12,407. (Mrs. Creighton.) Might I ask a question here? We have been told by several other witnesses that though salvarsan is only given in the first three months, the mercurial treatment must go on for a period of two years at least. Would you not grant that?—I must say that I think personally one's experience is not sufficient to tell one exactly when the combined course of salvarsan and mercury is efficient; whether a three months' course is going to be efficient or not. I think it will require several years before one will be able to settle that point definitely.

12,408. (Mr. Philip Snowden.) To pursue my question, if at the end of three months the Wassermann test indicates that the case is not cured, what further treatment would you have?—I should continue with mercury.

12,409. Would you keep him in the infirmary?—No, I do not think so. I think then I should advise him to attend the District Medical Officer for mercurial treatment.

12,410. And you would allow him to go on with his work at the same time?—Yes; provided of course that he were free from all signs of the disease—any

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rash, or any other manifestations of the disease. If the only evidence of the disease was a positive Wassermann. I should not debar a man from going to work on that account.

12,411. As a matter of fact, what do you find as a rule at the end of three months? I suppose you have patients whom you can prevail upon to remain in the infirmary for three months?—At the end of three months we almost invariably find that all the clinical signs have disappeared.

12,412. And in those few cases to which you apply the Wassermann test, what do you find?—I have not been able to use a Wassermann test for testing my results at all.

12,413. Then do you discharge a patient simply upon what you call the clinical evidence?—Yes, on the clinical evidence.

12,414. You do?—Yes; not on pathological findings.

12,415. And therefore you may discharge him uncured?—Yes.

12,416. Do you regard that as satisfactory?—No, I do not. I think we should have facilities for having Wassermann reactions applied in all these cases.

12,417. In every case?—Yes. Of course it becomes very difficult again to keep a patient in the infirmary after clinical signs have disappeared. That is the practical difficulty.

12,418. And do you not find it equally difficult to induce him to continue treatment after all inconvenience has ceased?—Yes, that is so too.

12,419. Do you think there is one working man living who could be induced to follow out the instruction that you give there in regard to the continuance of treatment for years?—No, I do not—not apart from clinical signs of the disease.

12,420. Quite so. Then what is the use of saying it?—My warning is confined to of impressing upon the patient that there is a risk of infection, and the importance of returning for treatment if he presents any clinical symptoms.

12,421. I was rather surprised to hear that there had been no reduction in the number of patients applying for treatment at your infirmary since the passing of the Insurance Act, or since the benefits began to operate. Do you think that the suggestion that was made by Sir John Collie just now fully explains that reason?—It only applies to the venereal cases; it does not apply to the ordinary cases at all.

12,422. Do you think there is unwillingness on the part of panel doctors to treat venereal cases?—No; I have no evidence of that at all. Of course they would probably only treat them by giving medicine by the mouth.

12,423. Do you think the ordinary medical practitioner is fully competent to treat cases of venereal disease?—He should be in most cases.

12,424. Is there not a slight difference between "should be" and "is"?—I am afraid I am not qualified to express an opinion.

(Mr. Lane.) Might I intervene, as I have to leave?

(Sir Almeric FitzRoy, in the chair.) Certainly.

12,425. (Mr. Lane.) You were asked with reference to the cases treated at your infirmary for three months, and you said you would have a Wassermann test done at the end of that three months. Do you think a Wassermann test done so shortly after an energetic course of treatment would be of any value?—I think the result would usually be negative, but I should like the test taken soon after the end of the course, and again later after an interval of some months.

12,426. You would prefer an interval of three months. I take it?—Yes. I am not quite prepared to say what interval would be best.

12,427. You were asked recently as to the sending out of those patients before they are cured; but if they are not cured it is very unlikely they will ever be in a position to spread the disease again?—At the end of three months?

12,428. Yes?—Yes, I should think so, except in very exceptional cases.

12,429. It is very exceptional after two injections of salvarsan and treatment by mercury that the patient will ever have a lesion by which he can convey disease?

—Yes; I think the objection is more theoretical than practical.

12,430. Except, of course, in the case of transmitting it to his children; that possibility would still remain?—Yes.

12,431. With regard to these papers of yours, they date back a good many years?—Yes.

12,432. I should think 20 years at least?—Not so long as that.

12,433. They are taken word for word from instructions which had been distributed at the London Lock Hospital for certainly 20 years?—I obtained them in the first instance from the London Lock Hospital. I think I have modified them somewhat.

12,434. Yes, you have?—But they were taken originally from the Lock Hospital.

12,435. And these were written when the theory was that syphilis should be treated for three years, and that at the end of that time the patient was cured?—Yes, that is so.

12,436. The theory of Mr. Hutchinson?—Yes.

12,437. But that is considerably modified at the present date, I think you will admit?—Since the use of salvarsan?

12,438. Yes?—Yes.

12,439. And that many of the cases of syphilis are cured in much less than two years?—Yes, I think so.

12,440. Cases may be cured in one year?—I think so. I think cases may be considered cured if, after an energetic treatment combining salvarsan and mercury, all clinical evidence of the disease has disappeared.

12,441. So that those instructions really require considerable modification?—Yes.

12,442. Both those as to syphilis and those as to gonorrhœa?—Not so much in regard to gonorrhœa.

12,443. I see you treat your gonorrhœa cases by irrigations, yet the patients are instructed to get a glass syringe, and are instructed in the method by which to use it?—Yes. I never let a patient do irrigation themselves. I really kept those rules in for cases where patients go out and wish to continue using an injection at home.

12,444. Are you aware how many infirmaries are sending cases to the Lock Hospital?—I have returns from them. I am told that in London cases are sent to the Lock Hospital from seven of the infirmaries.

12,445. Then the number of cases sent by each infirmary must be very few?—As far as men are concerned it must be; because I do not see how they get the accommodation for them.

12,446. There is plenty of accommodation; at least, there are plenty of beds vacant at the male hospital for cases that might be sent from infirmaries, but there are very seldom more than half a dozen cases in the hospital at a time from these seven different infirmaries?—I find that three of them say they send all their cases to the Lock Hospital, and three of them say they send female cases only, and the other simply says they send their cases to the Lock Hospital. It does not say whether they are all, or male or female.

12,447. If they are sent to the Lock Hospital, must they get there, or can they escape on the way?—I do not know how they are transferred; but I should think they would simply be told to go, and not be actually conveyed there.

12,448. I know in some cases they are conveyed by an official, but in many others I should think they would be instructed to go there?—I do not know what the process is.

12,449. One would expect that the number of cases from these seven infirmaries would be on an average more than one from each infirmary?—Yes.

12,450. (Mrs. Scharlieb.) Have you a maternity ward?—Yes.

12,451. Do you take not only births but also abortions and miscarriages there?—Abortions, as a rule, are taken into the general wards. Miscarriages over six months I usually send to the maternity ward.

12,452. Then, of course, you have a very fine opportunity for examining the products of conception?—Yes.

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12,453. Is that undertaken?—I am just now making arrangements to send all abortions to be examined.

12,454. And also to get blood from the placenta?—Yes.

12,455. Then would you communicate with the medical officer of health in order that some supervision should be exercised over the other children and the mother and father?—No, no information would be sent to the medical officer of health in a case like that. I do not think, as a rule, the medical officer of health would be prepared to undertake the work.

12,456. But would you not ascertain whether the mother and father were aware of this condition, in order that the other children might be safeguarded?—I should tell the mother in most cases, or the father; it would depend on the circumstances.

12,457. What, in your opinion, are the effects of gonorrhœa on women?—We see many serious cases amongst women which are undoubtedly attributable to gonorrhœa.

12,458. You find that the first effect on the woman is probable sterility?—I could not say that from my own personal experience and observations; but the statistics pretty well point to that.

12,459. Then later on the serious effects to which you were referring, I suppose, were pelvic inflammation and the diseases and operations consequent on that?—Yes, exactly. That is what I was referring to chiefly.

12,460. You would agree that the majority, or probably the majority, of pelvic operations on women are due to the consequences of gonorrhœa?—Pelvic operations on the tubes.

12,461. Yes, on the tubes and ovaries?—Yes.

12,462. I think you said in some cases there was no doctor on the staff capable of making the necessary investigations, doing the Wassermann reaction, and also applying the salvarsan treatment?—Not applying the salvarsan treatment—doing the Wassermann reaction.

12,463. I quite agree with you that unfortunately that is likely to be the case; because of course those who were educated even 10 or 15 years ago, unless they have been re-educated on this special subject, are undoubtedly not competent. Do you not think it is very desirable that the attention of the medical schools should be drawn to the further education of medical students in this special line?—No; I think the real line of advance now is in specialisation, and that these pathological tests should be done by a man who does nothing else but pathology.

12,464. That would suffice even for country districts?—Yes; there would be no difficulty now with the methods of transmitting any material required for examination.

12,465. Do you think that the hospital authorities of the country, generally speaking, are sufficiently alive to the great seriousness of these diseases to the nation? Do you think the hospital authorities as a rule are sufficiently willing to admit men and women suffering from venereal disease, and to treat them?—I am afraid I do not know.

12,466. Then with regard to the general public, would it be a service to the nation if the public as a body was further educated, and the people had some idea of the dangers they were incurring?—Yes, I think so. Undoubtedly, there is a great deal of ignorance among the general population as to the extent of the evil, and as to the seriousness of it.

12,467. Would you agree in teaching children in the schools physiology and the hygiene of reproduction, and teaching of adolescents and adults, I do not mean absolutely the pathology, but drawing their attention to the risks they run?—Yes; I certainly agree with that.

12,468. With regard to your leaflets; if you were revising them would you make them rather stronger on the question of marriage?—I have not really touched on marriage at all.

12,469. You simply say sexual intercourse should be avoided?—Yes; and I have not touched on the possible effects on children.

12,470. Would not you do so in revising them?—I think that is quite a point that might be done. In

dealing with this, I was really dealing with the patient himself or herself.

12,471. But it is desirable for the sake of the nation?—Yes, I quite agree.

12,472. (Mrs. Creighton.) I gather you are in favour of keeping the venereal patients in separate wards?—Yes.

12,473. Is that because of the character of the patients you get in a Poor Law infirmary, or would that be your opinion generally?—That would be my opinion generally. It would be chiefly to avoid any risk of transmission of infection amongst the patients. The risk is not very great, of course. If precautions are taken, it would be quite possible to nurse a venereal case in a general ward without any risk of infection; but still, one cannot take too great safeguards.

12,474. Other witnesses have said they felt they ought to be in the general wards, so as not to mark them?—Yes, I can see the objection on that score; but as a matter of fact I do not think it applies very much in our infirmaries, because there is no mixture of the cases in our lock ward with the cases in other wards; as a matter of fact other patients do not know what patients are in the lock wards.

12,475. But you do not think that would have any effect in preventing people from coming in?—No, I do not think so. As a matter of fact the majority of them do not know until they come in what wards they are going to.

12,476. With regard to those more modern treatments that you have at Fulham, were they introduced on your own initiative?—Yes.

12,477. Did you have much difficulty in persuading the guardians to submit to the expense?—My guardians have always left me a fairly free hand on matters of treatment.

12,478. Did they complain of the increased expense?—No, not at all.

12,479. Still, you do feel that you cannot go on using a Wassermann test as freely as you would like?—That is so.

12,480. You have the fear of the expense before you?—Yes. As regards the Wassermann test that is a different matter, but my guardians have never placed obstacles in my way as regards providing anything reasonable, at any rate as far as medical and surgical appliances are concerned; but as regards pathology it is a different matter. It is somewhat of a fresh subject to them, and it means a separate bill, and is rather apt to be more scrutinised than the drugs.

12,481. Then with regard to maternity cases, how far are you able to follow up the family history in a maternity case which shows signs of disease?—We either get the history from the mother or the father, as the case might be.

12,482. Have you any system by which that mother could be visited in her own home?—No, we have not at all.

12,483. Is it not a matter that it would be advisable to get any of your lady visitors at the workhouse to take up and collect information about?—The lady visitor who attends at the maternity ward very often interests herself in cases and follows them up. Then we also have a worker from one of the rescue homes who attends, and who looks after a case if we send for her, and the cases are admitted to the rescue home and looked after there.

12,484. I was rather meaning at the moment getting the family history?—As far as the married women are concerned, after they have left us their subsequent history is not followed up.

12,485. Do you think it would be advisable if it could be done?—I am rather doubtful about that, because any interference would probably be resented.

12,486. There is nothing that corresponds to an out-patient department in an infirmary, is there?—No, strictly speaking not. The district medical officer sees cases which come to him; and in many cases, where the patient is discharged from our infirmary, we recommend that patient to attend the district medical officer, if he cannot afford to pay a private practitioner and has not a panel doctor, in order to continue

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treatment. That is the only form of out-patient treatment we have.

12,487. Do you think that by increasing the possibility of treatment in such cases, one could carry on a really efficient treatment of venereal patients?—I think if we could arrange for them to come back to us to have treatment at intervals and be kept under observation for some time after treatment had ceased, we should be able to deal with venereal disease completely.

12,488. That would be at the infirmary itself, you mean?—Yes.

12,489. Rather than their going to the local district officer?—Yes. At the infirmary itself we have the record of the case; and, of course, he would be seen by the medical officer who had had charge of him.

12,490. Do you think there would be much unwillingness on the part of the men to coming back and keeping up their treatment?—I am afraid we should have some difficulty, especially where a patient had no symptoms of the disease at all.

12,491. I suppose as Fulham is a very poor district, the class of inmates in your infirmary is of a rather poor type, is it not?—No, I would not say that; I do not think that would apply to Fulham especially.

12,492. Do you get a large number of prostitutes?—No, we do not; we get a certain number, but I do not think the proportion is large. A number of the women admitted for venereal disease are domestic servants.

12,493. Do a great many come from rescue homes?—Not a great number; there is a certain proportion. As a matter of fact, all the cases that occur at the rescue homes are sent to us, I think.

12,494. Then you send them back to the home afterwards?—Yes, if they will go.

12,495. In those cases, if they will go, do you send directions to the home as to how they are to be treated?—In a case like that we should not discharge until the patient was free from any sign of disease, and then we usually let the lady in charge of the home know.

12,496. Do you send directions that she should continue treatment with mercury?—No, we do not. We should give her a full course and then discharge her.

12,497. You would not think it advisable to suggest that the medical treatment should go on?—No, I would not, unless there were further symptoms. After our complete course I would not suggest that she should go on.

12,498. I see in these figures that are given, from Birmingham especially, the proportion of women suffering from syphilis is larger than the men, and again in Bradford. Do you think that means that the women who go there are largely prostitutes?—I am afraid I do not know.

12,499. I am putting your own figures together. As far as I can make out your Fulham figures, you have a total of 66 men as opposed to 44 women, so that you have more men?—Yes, I think as a rule we have more men, both as regards early syphilis and late syphilis.

12,500. I suppose naturally there are more men suffering from syphilis than women in the community?—Of course the figures are very imperfect as to that.

12,501. But you do not think the prostitute comes in very large numbers to you?—No, not to us.

12,502. And you have no idea where she goes?—No.

12,503. (*Sir Malcolm Morris.*) How many years have you been at the infirmary?—Close on 15 now.

12,504. Is there any difference in the ratio of venereal disease at the beginning and now?—I do not think there has been much change in the number of cases admitted.

12,505. Have you ever taken out an analysis of the various years?—Yes; I have in some of them, but I have not the figures here.

12,506. Do they remain a pretty steady ratio all the way through?—Fairly. Of course there are variations, but they are not marked variations.

12,507. You have never had one year in which there has been a marked increase of either one disease or the other?—No, I do not think so.

12,508. And during all the earlier years, of course, you were treating them with mercury?—Yes.

12,509. How long have you been treating with salvarsan?—Since 1911.

12,510. If we count 1911, that is three years?—Yes; we started the first injection in April 1911.

12,511. How many injections in those three years will there be altogether?—In 1911–12 there were 194; in 1913, 137 injections, and from the beginning of this year to the present time, 54 injections.

12,512. During that time have you seen any case which has suffered from the effects of salvarsan?—No serious effects.

12,513. What have been the ill effects?—A temperature which has practically never been above 101 to 102, rigors, headache, general feeling of malaise, vomiting, and occasional exacerbation of the rash, or sore throat.

12,514. In any of those cases has there been any permanent injury?—None at all.

12,515. Are they very carefully selected cases?—Yes. We make a point of excluding cases suffering from Bright's disease or heart disease; or, in the case of nervous diseases, we either exclude them completely, or else give them a minimum dose to begin with.

12,516. Then in these selected cases, so far as you know, no damage has been done by this remedy?—No, I see no reason to think so at all.

12,517. On the other hand, you have seen the most rapid disappearance of the manifestations?—Yes; most remarkably quick disappearance in some cases.

12,518. Which particular type has done the best with salvarsan?—The primary and secondary cases, and some forms of tertiary ulceration.

12,519. Can you define more particularly than that any special types?—I think the cases which we have noticed as giving the quickest results have been some of the bad tertiary ulcerations.

12,520. Late manifestations?—Late manifestations.

12,521. Ulcerations of the mucous membrane, or ulcerations of the skin?—Ulcerations of the skin I am speaking of particularly.

12,522. Have you had bad cases of ulceration of the mouth, tongue, and so on?—Ulceration of the tonsils. We have had several cases there where the improvement has been remarkable.

12,523. Diseases of the tongue?—In late diseases of the tongue like leukoplakia we have had no improvement at all.

12,524. And chronic glossitis?—Very little improvement. Some of the patients have thought their tongues have improved, in the sense that there has been less hardness about the lesions.

12,525. Have you many tongue cases in the infirmary?—No, not very many.

12,526. On the whole there must be a comparatively small amount of venereal disease among the pauper class?—It does not come to us at any rate in very large proportions.

12,527. But from your district they would tend to come to the infirmary if they were paupers, would they not?—Yes, if they are paupers; or if they apply for medical treatment all of them would come to us.

12,528. Have you any experience as to why the pauper class should suffer less than the class immediately above it?—I am not sure that it does.

12,529. I do not want you to agree with that if you disagree with it?—No, I am not sure it does; because the cases that come to us are the cases that have made application for medical treatment; and I have no doubt there are other cases that never apply, knowing what they are suffering from, and not wishing to divulge it.

12,530. Then you think it is rather accidental than otherwise that there is a small proportion at a large Poor Law infirmary?—I should think so; but of course I have no figures to go upon at all.

12,531. Have you in your experience known any cases of people who have become paupers as a result of these diseases?—In the sense that they have become

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inmates of the infirmary, they have become paupers as a result of their infirmity.

12,532. Become permanent paupers, I mean to say?—One has the cases of late manifestations; especially of course the nervous cases, general paralysis, and tabes.

12,533. Would it be possible to give us statistics of the number of people who become actual permanent paupers as a result of either of these infections?—It would not be easy to get the figures out.

12,534. You see my point?—Yes, I do quite. Of course, as far as general paralysis is concerned it would be quite simple; but it would be very difficult first of all to define when the case became permanently pauperised. For instance, many of our cases of tabes do not stay in the whole of their time. They come in, and if any improvement at all takes place, they very often take their discharge and go out again; or if the circumstances of their friends improve to such an extent that they can have them at home and look after them, they frequently go out.

12,535. The treatment of gonorrhœa in men is extremely unsatisfactory, is it not?—Yes, I am afraid it is.

12,536. Have you had any personal experience of any vaccine?—The only use we have made of gonocœal vaccine has been practically in gonorrhœal rheumatism.

12,537. Have you had any good results?—Yes, in some cases definitely good. We have always used a stock vaccine; so that I think our results have not been so good as they might have been if we had used an autogenous vaccine.

12,538. Then what plan would you suggest that you would like to have adopted in order that you may be able to give autogenous vaccines?—If we had a pathological laboratory, there would be no difficulty in getting autogenous vaccines from that. We could send to it tubes of culture media inoculated from the discharges.

12,539. Where is the laboratory to be? Is it to be common with several infirmaries, or peculiar to your own?—my own idea would be to have one central laboratory for the whole of the metropolitan unicons, to

which we could send all our blood, cerebro spinal fluid and smears.

12,540. And preparations of vaccine, and everything?—Yes.

12,541. Have you formed any idea as to what size the central laboratory would be?—I have no doubt it would grow into a big thing; but it need not necessarily be big to begin with.

12,542. The whole of this is tending that way, is it not, so far as treatment and so on is concerned?—Yes.

12,543. Under whose control would that be?—Administratively under the Local Government Board, as far as we are concerned, at any rate.

12,544. And you advocate a central laboratory for London, at all events, and perhaps for other cities, under the Local Government Board, in order to carry out all these particular things?—Yes.

12,545. (*Sir Almeric FitzRoy.*) Among the ill effects you have noted in connection with the administration of salvarsan are they akin to the ordinary symptoms of arsenical poisoning, or are they due to some individual idiosyncrasy as a rule?—They are not quite the effects one would expect to get from arsenical poisoning, except so far perhaps as vomiting is concerned. They are rather symptoms due to the drug as a drug. Another idea is that they are due to the action of the drug on the organism itself.

12,546. Some peculiarity of the patient?—Not perhaps a peculiarity of the patient, although, of course, that comes in, no doubt.

12,547. Do you see anything of the effects of treatment by unqualified persons in the cases that ultimately come under your notice?—No, we do not. Occasionally we get a case of a man who says he has been receiving treatment from a herbalist or from some other unqualified person, but that, I think, is exceptional.

12,548. Do you think such persons have no considerable practice?—Their clients do not come to us; at any rate, so far as I know.

12,549. You do not hear anything of the later manifestations?—No.

(*Chairman.*) We are much obliged to you.

The witness withdrew.

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CHALMERS, Dr. A. K., medical officer of health for the city of Glasgow and President of the Society of Medical Officers of Health (joint evidence):

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all Doctors might not recognise - 8252

almost Non-existent in rural districts and uncommon in smaller towns, and reasons 8016, 8208-15, 8250-4, 8262-4, 8286, 8293-5

Primary, diminution not known of - 8255-6

Uncommon in small towns especially - 8029

Venereal Disease:

Bacteriological research:

Expenditure out of public funds by special Act - 8138-9

Need for provision of facilities and suggestion *re* establishment of institutions 8092-8, 8128-32

State should pay cost - 8133-53

Fee to medical practitioner for bringing man to hospital for salvarsan treatment and for subsequent treatment, suggestion - 8171, 8177-82

Incidence, no suggestion *re* obtaining accurate figures - 8012

Means should be provided for improved diagnosis and institutional treatment should be subsidised - 8125-8

at Military stations:

Decrease, and very small incidence except at and near Dublin and Belfast - 8014-5

Figures higher than in United Kingdom owing to extreme prevalence in Dublin 8107-8

Statistics - 8018-16

Patients go to dispensary doctors in less proportion than for other diseases, go usually to doctor not in neighbourhood - 8006-7

Treatment:

by Chemists and objection to 8216-23, 8291

Inadequacy - 8125, 8239

Women:

Difficulty of getting women to go for treatment and suggestion *re* getting hold of, through general practitioner for fee and man concerned - 8161-82

Large number not treated in any institution and some not treated at all in early stages 8285

Workhouses, inspection - 7997

Notification, might be advantageous but question if doctors would carry out, unless compulsory for fear of losing patients - 8087-8

Still-births, no objection to compulsory notification 8089

PARKES, Dr. LOUIS—*continued.*

DIAGNOSIS:

Bacteriological laboratories:

should be Available for free disposal of doctors 10,514-6, 10,737

Existing laboratories in London might be utilised and surrounding counties could be served by 10,588-9

Geographical distribution, question of 10,745-9, 10,764-6

Register should be kept and particulars given to L.G.B. if required - 10,562

Supervision by L.G.B. inspectors would be necessary - 10,565

Microscopical examination, free provision for doctors advocated - 10,529-32

EDUCATION OF THE PUBLIC:

in Schools, would be undesirable - 10,572-3

Young people, instruction might be given on general sexual matters of morality but not on diseases - 10,693-6

Hospitals, refusal of venereal cases in many 10,676, 10,680-1, 10,473

Innocent infection, proportion 10,677-9, 10,705-6

Marriage of unfit persons, prevention desirable, but question of possibility - 10,606-9

NOTIFICATION, COMPULSORY:

not Advocated until further knowledge obtained of amount of diseases, best methods of treatment, &c. - 10,566-7

Objects in view would be defeated by - 10,567

Quack advertisements, prevention suggested 10,723, 10,730-1

QUACKS:

Reluctance of patients to bring action against 10,727-8

Treatment of venereal disease:

Reason for people going to quacks - 10,650, 10,655-6

Suppression:

not Advocated and reasons, but education will decrease - 10,722-6

not Desirable at present as public opposition would be aroused - 10,619-34

Desirable but danger - 10,722-5, 10,729

better and cheaper Facilities for treatment advocated in preference to penal code 10,527-8, 10,623

Prosecutions would be difficult and law would become a dead letter - 10,631-4

Registration of births, deaths and marriages, to medical officer of health, proposal - 10,449, 10,732-6

TREATMENT:

Approved institutions:

Attitude of medical profession to, question of 10,660-3

Cards to be handed to patients with statement of treatment and warnings would be useful 10,707-15

Central office or registry should be formed at L.G.B. and reports sent to - 10,559-62, 10,596-605, 10,602-5, 10,610, 10,614-8

Experts, opinion, *re* method of appointment 10,664

Facilities should be available to any person whether resident or not within district, and consequent need for grant from national funds 10,484-6, 10,592-4, 10,750-4, 10,760

Geographical distribution, question of 10,745-9, 10,764-6

Good results anticipated - 10,569-71

Hospitals would have to comply with regulations and rules made by L.G.B. or local authorities 10,774-9

Local management important - 10,761-3

all London large general hospitals would probably be willing to take up scheme - 10,589

Medical practitioners should have facilities for advice and consultations of authorised medical officer at - 10,533-5

Name, question of, and "venereal" would be objected to - 10,666

PARKES, Dr. LOUIS, medical officer of health of the Metropolitan Borough of Chelsea (joint evidence):

10,432-867

Chastity, possibility and healthiness of, should be pointed out - 10,738-44

CHELSEA:

Still-births, no investigation being carried out as regards - 10,860

Venereal disease, facilities for treatment and inadequacy - 10,473-4, 10,480, 10,674-81

Wassermann tests for, carrying out of, by Lister Institute for Preventive Medicine - 10,667-73

Death certificates, to medical officers of health, suggestion *re* - 10,449, 10,732-6

PARKES, Dr. LOUIS—*continued.*TREATMENT—*continued.*Approved institutions—*continued.*

- Numbers only should be used if patients objected to giving names - - - - 10,557-8
- Panel doctors should not be entitled to refuse treatment owing to free provision of treatment in - - - - 10,583-7
- Payment from national funds advocated and reasons - - - - 10,564, 10,590-5, 10,758-68
- Register with histories of patients should be kept and quarterly reports should be made to L.G.B. and medical officers of health 10,559-61, 10,599-601, 10,614-8
- Special departments at every large general hospital willing to undertake work suggested 10,665
- Conferences between county councils *re* provision of free treatment at general hospitals advocated 10,537-41, 10,546

Free:

- Moral objection on part of local authorities to provision of, and question of answer to 10,469-72, 10,537, 10,687-92, 10,716-21
- Prejudice against, by local authorities, declining and publication of evidence of Commission will assist - - - - 10,755-7

Government grant:

- Arguments for - - - - 10,758-60, 10,762
- Basis of number of patients preferred 10,510-3
- Density of population would be only feasible basis - - - - 10,657-8
- Institutions receiving, hours should be those most convenient to patients in locality 10,556
- General view in favour of proper treatment increased during last few years especially since appointment of Commission - - - - 10,691
- Local authorities should be empowered to offer facilities but compulsion not advocated 10,464-72, 10,500-1

- Local Government Board should be empowered to take steps where none taken by local authorities 10,551-4, 10,769-73
- in London, L.C.C. not the best body to take up 10,780-1

Salvarsan:

- few Medical practitioners capable of giving, at present - - - - 10,536
- by Panel doctors, not to be expected 10,702-4

VENEREAL DISEASES:

- Government circular to all medical men pointing out necessity for early treatment, &c., suggestion 10,572-8
- L.G.B. should issue order or orders under Public Health Act declaring diseases to be endemic in order to enable facilities for treatment to be increased - - - - 10,487-95
- Wassermann test, free provision for samples sent by doctors, advocated - - - - 10,530-2

PARSONS, Dr. C. THACKRAY, Medical Superintendent of the Fulham Infirmary: 12,223-549

- Birmingham Infirmary, arrangements *re* venereal cases - - - - 12,328
- Detention, compulsory, danger of, and should be kept in background and used only in exceptional cases - - - - 12,276-82

EDUCATION OF THE PUBLIC:

- Children in schools should be taught physiology and hygiene of reproduction, and adolescents and adults be warned of risks - - - - 12,467
- Desirable - - - - 12,466

FULHAM INFIRMARY:

- Accommodation for all diseases, and average number of patients - 12,229-31, 12,378-80
- Admission of patients - - - - 12,392-3
- Class of patients - - - - 12,331-2
- Conception, products of, arrangements being made for examination, and information would be given to father or mother - - - - 12,452-6
- Gonorrhœa:
- Number of cases, March 1912-13 - 12,251-3, 12,284

PARSONS, Dr. C. THACKRAY—*continued.*FULHAM INFIRMARY—*continued.*Gonorrhœa—*continued.*

- Many people leave infirmary in infective state 12,288

- Stage at which patients come - - - - 12,287
- Treatment, nature of - - - - 12,285-6, 12,443
- Gonorrhœal rheumatism, vaccine treatment used and some good results, but would have been better with autogenous vaccine - 12,536-8
- Maternity ward - - - - 12,450-1
- Medical staff - - - - 12,377-83
- Nervous diseases, great number of, but not many attributable to syphilis - - - - 12,254-9
- no Out-patient department - - - - 12,232
- Out-patient treatment, patients in some cases recommended to attend district medical officer 12,486

- Patients, no reduction as result of Insurance Act 12,333-40, 12,421

Salvarsan treatment:

- Cases carefully selected for, and certain diseases excluded - - - - 12,515
- Cases giving best results - - - - 12,518-25
- Difficulty of getting patients to continue treatment and suggestion 12,273-82, 12,351-3, 12,370-1, 12,417-8, 12,487-90
- Ill effects, question of cause - - - - 12,545-6
- Method used in Rochester Row Hospital adopted and considered more satisfactory, but neo-salvarsan used as considered safer than salvarsan - - - - 12,234-6, 12,360-3
- Modern treatment, no difficulties made by guardians - - - - 12,476-8
- Parasyphilitic cases - - - - 12,269-71
- Patient sent to bed for 12 hours after injection 12,272
- Period required - - - - 12,401
- Quick disappearance of manifestations seen 12,517
- no Serious effects but a few cases of temporary ill effects - - - - 12,249-50, 12,509-16

Syphilis:

- Number of cases, March 1912-13 12,251-3, 12,284, 12,354-7
- Congenital, where babies syphilitic mother treated and family history inquired into and question as to following up subsequent history 12,265-8, 12,481-5

- Practically all cases in secondary or tertiary stages - - - - 12,260-4
- Treatment in, men not disfranchised by - 12,395

Venereal disease:

- Accommodation - - - - 12,225
- Accommodation quite sufficient - - - - 12,228
- no Cases sent on to other institutions for treatment - - - - 12,233
- little Change in amount in last 15 years 12,503-8
- Class of patients - - - - 12,492-5, 12,499-502
- Few patients having been previously to unqualified practitioners - - - - 12,547-9
- Many patients have first been to panel doctor 12,336-7
- Patient discharged after three months if all clinical signs disappeared - - - - 12,411-5
- Patients from rescue homes, not discharged until free from any sign of disease and continuance of treatment after, not considered advisable - - - - 12,493-7
- Printed notices given to patients with primary and secondary syphilis and gonorrhœa and question of certain modifications in 12,240-2, 12,358-60, 12,389-91, 12,402, 12,419-20, 12,431-42, 12,468-71
- Reasons for patients coming - - - - 12,396-7
- Small proportion of cases not necessarily a proof of small proportion of disease in pauper class 12,526-30
- Wassermann Institute, specimens sent to, in certain cases, but more use would be made of if examination made free and carrying out of test after treatment desirable 12,243-8, 12,257-9, 12,346-9, 12,416-7, 12,425-6, 12,479-80

PARSONS, Dr. C. THACKRAY—*continued.*

GONORRHEA:

- in Men, treatment extremely unsatisfactory 12,535
- Treatment, irrigations locally and copaiba, &c., by mouth - - - 12,285-6, 12,443
- in Women, serious effects - - - 12,457-61

HOSPITALS, TREATMENT OF VENEREAL DISEASE:

- Salvarsan, majority of infirmary patients would be unable to pay fee charged for - - - 12,350
- Separate wards preferred - - - 12,472-5
- Special wards preferred for primary and secondary stages, but no objection to treatment of tertiary symptoms in general wards - - - 11,226-7

INFIRMARIES, POOR LAW:

- All, should be able to give salvarsan treatment and have any tests made - - - 12,319-21
- All, should have access to laboratory and Wassermann tests, and central laboratory preferred to one in each infirmary - - - 12,294-7
- London, treatment of venereal disease:
 - Certain infirmaries should be specialised to undertake 12,299-300, 12,364-6, 12,372-6
 - Facilities considered adequate as a rule, but not facilities for tests and salvarsan treatment 12,316-8
 - Facilities and diversity - - - 12,298, 12,384
 - Number of venereal cases in the year in certain 12,315
 - Sending of cases to workhouses, Lock hospitals or Bow Institution - 12,301-4, 12,341-5, 12,444-9
 - Salvarsan and neo-salvarsan, number of infirmaries giving - - - - 12,341
 - Wassermann test, number of infirmaries in which used, and expense the main obstacle 12,307-11
- Medical staff, question of competency of assistants 12,372-83

Provincial, treatment of venereal disease:

- Number of venereal diseases in certain 12,329-30, 12,387-8
- Facilities - - - - 12,322
- Wassermann test, number in which used 12,327
- Salvarsan treatment:
 - if Man not cured after three months should attend district medical officer for mercurial treatment - - - - 12,408-10
- Variation in different infirmaries and circular letter from L.G.B. giving results obtained with method adopted at Rochester Row would be useful - - - - 12,236-9
- Venereal cases isolated and precautions taken but no punitive, &c., restrictions 12,312-3

LABORATORIES:

- Central, for whole of metropolitan unions and perhaps for other cities, under L.G.B., suggestion 12,539-44
- Pathological tests should be done by specialists 12,462-4
- Lock Hospital, patients sent to, from infirmaries, cost of maintenance charged to guardians 12,342
- Night clinics, would be useful - - - 12,293

NOTIFICATION, COMPULSORY:

- Following up of, by medical officer of health, would tend to deter people coming for treatment 12,283
- for Statistical purposes only, no objection to 12,283
- Paupers, question as to number of people becoming, as result of venereal disease - - - 12,531-4
- Poor Law, all syphilis patients should be sent to infirmaries for course of salvarsan treatment 12,289-91

- Syphilis, cure in three months probably possible, but further investigations needed - - - 12,406-7

TREATMENT:

- by Panel doctor, no reluctance on part of doctors heard of, but would probably only treat by medicine - - - - 12,422
- System of patients going into infirmaries for injection and later on going home and returning weekly for other injections, staying perhaps from Saturday to Monday, suggestion 12,290-1

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PARSONS, Dr. C. THACKRAY—*continued.*

- Wassermann test, cost - - - 12,311, 12,385-6

WORKHOUSES:

- Lock wards in many - - - - 12,305
- Treatment of venereal disease, no knowledge as to conditions - - - - 12,367-8

- POWER, D'ARCY, M.A., M.B. (Oxon), F.R.C.S., surgeon to, and lecturer on surgery at St. Bartholomew's Hospital, and representative of Royal College of Surgeons of England and Royal Society of Medicine: - - - 8296-829

- Aneurysms, majority result of syphilis - 8333, 8549-50

- Arterial sclerosis, connection with syphilis - 8747
- Arteries, inflammation, connection with syphilis 8332
- Arthritis, treatment by irrigation or injections and massage of the prostrate - - - 8519-23
- Bladder, inflammation of, and of glands at base of, result of gonorrhœa - - - - 8316
- Cancer, no connection with syphilis except in tongue 8334

CANCER OF THE TONGUE:

- less Common in women than in men - 8745-6
- Majority of cases considered the result of syphilis 8333, 8548, 8736-54
- Chancroid, distinction between syphilis and, facilities better than formerly and means available in large towns though not yet in country - 8303-5

DIAGNOSIS:

- Early, importance of - - - 8597-608, 8718-20
- Facilities for, in public institutions all over country, desirable - - - - 8349-50

EDUCATION OF THE PUBLIC:

- of Adolescents, desirable, by parents, doctor, or schoolmaster, but undue publicity must be avoided - - - - 8574-6
- of Boys and girls, organised methods not advocated 8689-93
- Gradual spread of information preferable to definite arrangements 8688-9, 8708-15, 8820-2
- Impulse will still make people go wrong, and opportunity must be taken away 8691-3, 8710-5
- Need for - - - - 8571
- some People ready to take warning and others not, but no class distinction - - 8562-3, 8684-5
- greater Publicity will help - - - 8572-3
- Goldsmith, Oliver, cause of death 8320, 8416-22

GONORRHEA:

- Blindness more frequently caused by, than by syphilis - - - - 8669
- more Common than syphilis - - - - 8657
- Deaths from:

- Direct, very few, but considerable amount of mortality indirectly due to - - 8524-5
- Many, really due to, not so returned - 8321

Diagnosis:

- Easy in early stages in both sexes - 8322-3
- by General practitioner 30 years ago, less reliable - - - - 8324
- Diseases connected with - - - - 8315-21
- Effect on birth rate, comparison with syphilis 8667-8, 8812-3

- Far reaching effects of - - - 8307, 8544-50
- Immunity against, no suggestion *re* treatment to make people immune - - - 8408-15
- as Local and curable disease, witness was taught to regard, as student - - - 8511-2
- not a Local disease only - - - 8309-10
- in Men, sequelæ of, from surgical point of view, and comparison with syphilis - - 8464
- Prevalence among upper and upper middle classes, considerable amount, as more careless than others 8384-7, 8423-5

- Reinfection more common in, than in syphilis 8665

- more Serious to individual and syphilis more serious to race from surgical point of view 8306, 8464-74, 8545, 8656-72
- more Serious disease than generally considered 8325-6
- more Sterility produced by, than by syphilis 8666

F f

POWER, D'ARCY—*continued.*GONORRHOEA—*continued.*

Treatment:

- less Amenable to, than syphilis - 8469-71, 8526-8, 8650-3, 8660
- not Curable in advanced stages - 8466, 8471
- Curable if sufficient time and trouble taken - 8311-4, 8398, 8404-7

- Nature of most recent treatment - 8475-9
- in Out-patient department, question of - 8480-2, 8495

- Vaccine, often serviceable - 8311-2

Heart, degeneration, connection with syphilis 8647

HOSPITALS:

Genito-urinary departments:

- Advocated - 8351-5, 8358-9
- Gonorrhœa treatment, question of possibility of - 8480-2, 8495

- Name not important so long as not "venereal" - 8766

- Nature of cases to be sent to - 8496-502

- Out-patient clinics at convenient hours, with a few beds, advocated - 8356-6, 8536

- Public will come to appreciate, in time - 8379

- Question of separate laboratories for, or central laboratory - 8367-9, 8694-8

- State should bear expense - 8370-3, 8767

- Treatment, definite printed scheme not advocated, should be left to individual - 8503-10

- Treatment of venereal disease, improvement desirable - 8577

- Infection, sexual and non-sexual, question of proportion - 8794-802

- Ireland, much tuberculosis and comparatively little syphilis - 8339

- Joint diseases, connection with gonorrhœa - 8315, 8465

KIDNEY DISEASES:

- Connection with gonorrhœa - 8465

- Connection with syphilis - 8647

- Inflammation, remote result of gonorrhœa 8317-9, 8418

LABORATORIES:

- Central, advantages and disadvantages 8367-9, 8694-8

- State subsidies necessary - 8768-70

MARRIAGE:

- two Cases of, within a fortnight of warning against - 8562-5, 8771-3, 8779-9

- Certificates of health, desirable but practicability doubted and education preferred - 8542

- of Man or woman before fit, prevention very desirable if possible, but compulsion very difficult - 8426-42, 8699-707

- Parents of girl should take precautions 8427-32

- Period desirable before, after treatment 8621-3

- with Positive reaction, should not be allowed 8616-25

- of Unfit, difficulty of preventing - 8774-6, 8780-2

MEDICAL MEN:

- All, better qualified in relation to venereal diseases than quacks, &c. - 8784-8

- Post-graduate work, would very often not be possible - 8579-80

- Medical students, inadequate instruction and improvement desired - 8718-20, 8783

NOTIFICATION, COMPULSORY:

- Confidential, would soon become a dead letter 8376

- Early recourse to properly qualified doctor would be checked - 8443-4

- Objection to, owing to publicity - 8374-5

- Valueless without means of insisting on treatment 8376-8

- Pelvic inflammation, result of gonorrhœa - 8316

- Peritonitis, result of gonorrhœa - 8315

- Prostrate gland, inflammation, result of gonorrhœa 8316

QUACKS, TREATMENT OF VENEREAL DISEASE:

- Checking of, no suggestion for - 8394

- not Increasing materially - 8395

- most People go first to quacks - 8392-3

POWER, D'ARCY—*continued.*QUACKS, TREATMENT OF VENEREAL DISEASE—*continued.*

- Pretending to diagnose venereal disease, law strong enough *re*, if put into force - 8614-5

- very Prevalent and as much among upper as working classes - 8396-7

- Resort of upper classes to - 8537-9

- Rachitis, predisposition produced by syphilis 8643-4

- Rheumatism, gonococcal infection, vaccine treatment 8483-93

- Rupia, rare - 8587-8

ST. BARTHOLOMEW'S HOSPITAL:

- Gonorrhœa, sequelæ, nature of treatment 8483-93, 8515-23

- Treatment of venereal disease: no Beds set apart for, and no special teaching 8529-30

- in Out-patients' department, early cases, seldom taken in - 8360-3

- Salvarsan treatment given and patients sent home and no evil results - 8551-8

STRICTURE OF THE URETHRA:

- 99 per cent. of cases considered due to gonococcal infection - 8721-4

- Remote result of gonorrhœa - 8317-9, 8544-7, 8725-9

SYPHILIS:

- as Causal agent in disease, more stress should be laid on, in medical schools - 8341-6

- Congenital: Deterioration of intellectual qualities of second and third generation 8329-31, 8633-8, 8646, 8730-5

- Patient would not be told nature of disease but parents should be to prevent trouble with other children - 8814-7, 8823-9

- Danger owing to slight effects at first resulting in severe after effects - 8340, 8533-5, 8600-6

- more Dangerous to State than individual 8327-8

- Diseases resulting from - 8332, 8647-8

- Prevalence among upper classes, difficulty of obtaining information - 8390-1

- more Serious to race and gonorrhœa more serious to individual from surgical point of view 8306, 8543, 8656-72

- Treatment, more amenable to, than gonorrhœa 8469-71, 8526-8, 8650-3, 8660

- Type, no change, but people better fitted to fight owing to improved hygiene - 8581-9

- Virulence, question of, and very bad cases seen lately - 8381-3

TREATMENT:

- Cure: Reinfection a sign of - 8593-5

- no Wassermann reaction for two years after treatment, a sign of being on way to 8591-2

- Early, importance of - 8597-613

- Full, need for, and education will be useful in leading to - 8362-6

- Printed instructions to patients, proposal approved 8818-9

- Salvarsan: Condemnations of, made by those who have not tried - 8840

- as definite Cure, not yet proved 8651-5, 8789

- Importance in preventing spread of disease 8791-808

- Injectations should be continued until Wassermann is negative - 8680-3

- Mercury and, combined, preferable - 8676-9

- very Useful for shortening process but mercury treatment must be used as well - 8449-63

- Value of, for shortening cure, but not a cure unless used in earliest stages and then not to be trusted - 8673-9

- Vaccines, used for about 10 years - 8559-61

- Tuberculosis, syphilis may produce predisposition to 8335-9, 8640-2, 8755-65

VENEREAL DISEASE:

- Carelessness *re*, in upper classes - 8716-7

- Stigma must be removed - 8578

- Wassermann test, standardisation desirable 8626-32

RICHARDSON, ROBERT FRANKS, M.D., Cincinnati, U.S.A., and member of the National Association of Medical Herbalists of Great Britain: - 7508-7991

Advertises, but not specially *re* venereal disease 7795-7

Allopathy given up in favour of herbalism 7615-20

Entitled to practise in America and give death certificates - - - - 7781-2

Fees charged - - - - 7981

GONORRHOEA:

not more Common than 25 years ago owing to education - - - - 7825-6

Eyes of children affected - - - - 7780

Herbalism, defence of system - 7650-9, 7853-60

HERBALISTS:

Bacterial theory of disease accepted and acted on by some - - - - 7571-3

Cancer, diagnosis and some cases of cure 7687-704

Death certificates, practice *re* - 7667-74, 7702-4

Diagnosis by:

Difference between tabes and G.P.I. - 7982

Gonorrhœa, methods - 7597-603, 7746-57, 7761-76, 7977-8

Syphilis:

Conditions determining diagnosis as tertiary 7809-21

Methods - - - - 7543-78, 7720-9

Microscope might be useful - 7574-8

Wassermann test not used and reason 7551-70, 7730-7

Freedom to practice in England - 7987, 7991

Number in U.S.A. and Great Britain 7659, 7790

Training and knowledge 7520-5, 7660-3, 7675-84, 7868-72, 7918-49

Treatment by:

Appendicitis - - - - 7963-70

Gonorrhœa:

Length of time required for cure and evidence of cure - - - - 7822-3

Methods - - - - 7604-5, 7777-80

Question of cure - - - - 7827-8

Mental diseases - - - - 7610-3

Prostitutes - - - - 7759-60

Purulent discharges - - - - 7960-2

Stone in the bladder - - - - 7801, 7979-80

Stricture of the urethra - - - - 7973-6

Syphilis:

Length of time required for cure and evidence of cure - - - - 7803-8

Methods - - - - 7579-96

Question of cure - - - - 7827-8

System - - - - 7534-42

Whooping cough - - - - 7655

LOCOMOTOR ATAXY:

Connection with syphilis - - - - 7846

Symptoms - - - - 7847-52

NATIONAL ASSOCIATION OF MEDICAL HERBALISTS OF GREAT BRITAIN:

Charter, desire for, and claim that people should have right to consult herbalists - 7630-59, 7684

Free under Apothecaries Act of 1814 - 7988-91

Herbalists outside, considered not qualified 7789-92

Members, no special reputation for dealing with venereal diseases - - - - 7904-11

Membership:

Examination for, and diploma, and nature of examination - - - - 7515-9, 7861-7

Qualifications - - - - 7526-33

Objects of, and membership - - - - 7512-4

Position as regards registration in England 7621-9

Practice - - - - 7873-6

Qualifications and training - - 7783-8, 7918-37

SALVARSAN TREATMENT:

not Approved - - - - 7593-6, 7738-40, 7802

Knowledge of - - - - 7899, 7954-9

SYPHILIS:

not more Common than 25 years ago owing to education - - - - 7825-6

Diseases connected with - 7606-9, 7837, 7971-2

Effects on public health serious - - 7614

RICHARDSON, ROBERT FRANKS—continued.

VENEREAL DISEASES TREATED BY:

Cases coming after going to allopath - 7798-801,

7829-36, 7877-84, 7887-902

Decrease - - - - 77794

Age of patients - - - - 7885-6

ROUTH, Dr. AMAND, Consulting Obstetric Physician to Charing Cross Hospital and to Samaritan Free Hospital for Women and Children: 9340-708

ABORTIONS:

Discovery of syphilis, question as to procedure *re* treatment of parents- - 9517-22

Intentional, considerable amount - 9680-1

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